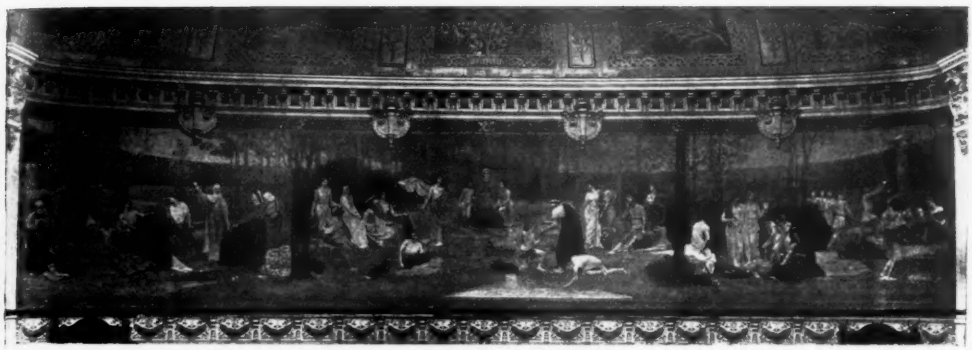


The New Sorbonne : " The Sacred Grove " (Painting by Puvis de Chavannes in the Grand Amphitheatre). M. Nénot, Architect.

MODERN FRENCH ARCHITECTURE.

By Fernand Billerey.

Read before the Royal Institute of British Architects, Monday, 17th March 1913.

THE French architect and writer on architecture, Blondel, who lived and worked during the reign of Louis XV., used to protest against the free tendencies of the architects of his time, strongly convinced that he at any rate still adhered to the good traditions of French architecture as practised under the previous king, Louis XIV. Time has shown his error, for we, after 150 years or so, would without hesitation classify Blondel's work as belonging to the Louis XV. period ; so that, in spite of his very clear-sighted studies, this great man was unable to analyse the real characteristics of the architecture of his own time. I am afraid that my modest views of the French architecture of to-day may not be any clearer than Blondel's ideas were about that of the eighteenth century, and I am fully conscious of the difficulties of the task that I have to perform.

To appreciate rightly any social development, it is necessary (as for appreciating a picture) to be able to stand back and judge of the whole. In considering modern French architecture, none of us could have that standing-back point of view which centuries will afford to future generations, but you, Gentlemen, at least have that which distance affords, so that your appreciation of French work is probably nearer the point than that of any Frenchman. Besides, you have always given in your studies a kind and watchful attention to the development of architecture in France ; many of the lectures given here have either borne on the history of French architecture, or contained some reference to it in the past or in the present day. Some of you are students of French art whose critical work and comments are authoritative, and I am afraid that whatever I may show, or explain, may be of little novelty and of little use to such learned critics as (to name only one instance) your President, Mr. Blomfield.

My excuse in speaking to-night is that, having worked amongst you already a few years, I may have acquired a little of your way of appreciating French work. At any rate, I have learned to love so much the artistic manifestations of all periods of your great civilisation, and I feel so indebted, not only for what I have learned amongst you, but for the kind and generous spirit with which I have been received, that I shall proceed with this study with the intention not merely of showing facts with which you are probably well acquainted, but of making of it as far as possible a kind of parallel between the development of architecture in our two countries, and with the hope that such comparisons may, perhaps, be of some little use to you in the great problems either of education or of general development which I know are now under your consideration.

As Mr. Blomfield very aptly remarked at a previous meeting here, "The French architects of to-day are not the French architects of former days." Indeed, no one in our day is what men were in former days—better or worse I do not know—but, very rightly, we are quite different. The nineteenth century has probably brought more changes in civilisation than any other century in the history of mankind. Progress in civilisation may be a wrong idea, as men are probably no better and no wiser to-day than they were before, but if, according to Bacon's theory, the object of philosophy and of science is to increase the power of man over Nature, then progress in that sense has been for the nineteenth century not a natural evolution, but a revolution. So rapid have been the changes in adding new power to the hand of man that artists and architects who used to lead the way in civilisation have in this remarkable epoch hardly kept pace with them.

Altogether new problems to face—not a scarcity, but a superabundance of means of building—new materials—new ways of using old materials—too many facilities for decorating—these are the conditions of modern architecture. Rationalism, steel and ferro-concrete constructions, modern expression of modern needs are thoughts which assail the mind of the modern designer. Architects are a dissatisfied body who feel that, if a great deal has been done, a great deal more has still to be done. Probably no country can yet take credit to itself that its buildings are the perfect expression of the new conditions brought about by science; but if there were only one country where modern problems have been faced by architects with that open mind and self-confidence which are the result of technical knowledge, France might claim to be that country.

There has been in France during the last century a fever of construction which has only been equalled in those new countries which have formed themselves on the old continents or on the new. Paris has been replanned and practically rebuilt during the last sixty years. But, whereas these new countries have sometimes erected their new towns in a hurried and somewhat coarse manner, as is natural to young nations, France, on the contrary, has brought to her new work the deliberate care and the knowledge which she owed to her glorious history.

I believe there are two principal reasons for this high standard of technical knowledge. Before all, the French people themselves. In spite of some recent Pan-Germanistic theories on the ethnology of France, I still believe France to be a Latin country, and I see sufficient proof of it in that spontaneous enthusiasm with which the French people at the time of the Renaissance made their own that Latin spirit of order, logic, and method in all intellectual productions. The Renaissance spirit has penetrated so deeply into the heart of France that it seems to have come to the French, not as a painful constraint, but rather as a relief to the complications and subtleties of the Middle Ages. To show how deep and natural is the sense of symmetry and orderly grouping in the French worker, I intend to study as an instance the little French *agent-voyer*, or village surveyor, setting to work to plan, say, a municipal school and Mairie, and compare him to one in a similar position in Great Britain. Here, the man will set first the principal room he has to deal with to the dimensions he wants it, place it as best suits the north or south light; he will respect a hedge or a ditch that exists on the site; if some smaller room is required he will not modify that which he has already completed, but will add this new room at the place where it comes most conveniently for circulation, light, or otherwise. If another room is required, it is not likely to disturb the arrangement already made for the previous ones. He analyses each element separately in all its practical and economical sides, and adds one to the other as best he can according to what he knows of the requirements. The considerations which will determine the mass of the entire building are, above all, considerations of utility, and the appearance will depend on what he knows in the treatment of the details. He sets to work like the Gothic builders did, and if nowadays the result is not generally called Gothic because the striking features of Gothic details are missing, nevertheless the essentials are Gothic in this respect that the grouping or relative importance of the elements is not governed by a proportionate relation of the detail to the whole. The French *agent-voyer* does not

analyse details in the same way ; he conceives at once a little monument ; he knows roughly what elements he has to deal with, and will make a synthesis of it. The Mairie will form the central block, the boys' school on the one side will balance an exactly similar girls' school on the other side —north and south do not matter—windows are the same on the left as on the right, equally spaced ; no ditch will interfere, but the Mairie must be on the axis of the village green. One may smile at this rather naïve sense of symmetry in such small buildings, but I like to consider that this born tendency to balance, however ridiculous it may be on these small lines, is a marked proof of the French inclination towards monumental architecture.

These remarks cannot, of course, apply to the good men of either country ; indeed, the really good French architect will not allow the practical side of his work to suffer from his love of order and symmetry. Equally, the educated architect in Great Britain will know how to subordinate his inclination for practical considerations to the requirements of architectural grouping ; such great names as Inigo Jones, Wren, Gibbs, Adam, or Chambers are sufficient proof that your nation is capable of adapting itself to the most refined kind of classical composition ; but it seems to me that these achievements have been attained by the personal effort of much-travelled and highly cultured men. I feel that I can say that the British mind is naturally inclined towards the Gothic methods of setting to work, whilst the symmetrical and orderly grouping of the masses is a natural tendency of the French mind.

The French spirit of order and organisation has naturally enough not only expressed itself in the classical planning of the architects. It appears in all manifestations of French social life. Whether the politician be Colbert or Napoleon, the French have planned on classical lines their roads and their canals ; they have codified their laws ; they have centralised their political administration to an extent which is not without its critics ; and they have organised their education, particularly the education of the artists, and amongst them that of the architects. This is the other cause which I think makes for the classical value of the average architectural production in France.

I intend to give to this question a little more importance perhaps than I should if I considered only its bearing on the present subject, but knowing what anxious attention you are giving to the question of the education of architects in Great Britain, I feel that views on this subject, however unauthoritative they may be, may possibly be opportune at this moment. The education of the architect in Great Britain is far from being neglected, in fact there are many schools where the greatest care and attention are given by the best men to the welfare of students. But perhaps it may be said that the number of these schools, together with a certain lack of co-ordination between them, tends to weaken their efficiency and prevent that unity of purpose which is necessary to obtain the complete confidence of the student. It must be realised how distressed is the mind of the beginner in architecture in our day. Ignorant as he is of the practice of composition, and often of the most elementary methods of setting to work, he is induced to get his inspirations from such very different sources as Ely or St. Paul's Cathedral, Chartres or the Louvre, the Forum of Rome, the Parthenon, or St. Sophia in Constantinople. The tendencies of his elders in practice are so varied that he does not know whom to follow, or, rather, he does not know how to discern those qualities they have in common, and which make for their value. Unless a strongly organised system of education gets hold of him and conducts him by degrees to knowledge, his mind will be a sort of Tower of Babel, from which confusion cannot be cleared. Doubt troubles the French student but little. He knows only of one school—and he goes to it.

I have often heard it said here that French architects in their school are taught to adhere to old French traditions, and that in this fact lies their superiority. I take this opinion as such a great compliment that I should by no means think of contradicting it. Nevertheless, I should like to analyse these traditions. Are they traditions of style ? How could they be ? I intend to

show, in reviewing with you the nineteenth-century work, that French architecture has passed through evolutions of style quite as varied and numerous as your own architecture has done. Buildings of to-day do not resemble those of thirty years ago—still less those of 1820 or 1830—and all these have little in common with eighteenth-century architecture.

Are they traditions of methods in setting to work? Perhaps—but, still, we do not work like our grandfathers—tracing paper, lead pencils, transfer paper, the introduction of the metric system have changed ways and habits.

Are there any traditional rules or dogmas? I know of none. The French tuition offers nothing of university teaching. It does not teach, in fact. I know of no particular system of proportions either by relation of mathematical figures or correspondence of angles at certain degrees.

To my mind, the greatest and most important tradition followed by French students is that tradition of working in common in a studio under the guidance of a master. The studio keeps alive the experience gained by previous generations, and each generation adds to that experience the benefit of its own, supersedes slowly out-of-date methods or fits them to newer requirements. The master has himself been in the studio in his younger days, has obtained the degrees and successes which students are now seeking for, and offers them the benefit of the experience he has himself acquired by his work, his travels, and his achievement in practice. But, perhaps, still more than by the influence of the master, the young student will benefit by the experience gained by his companions who have been in the studio a few years before him. Knowledge comes to him but slowly—odd work or tracings are at first his only occupation. They thoroughly train him in the material part of his work and provide him with a certain stock of details, whilst the discussions among his elders and the corrections of the master lead him to understand what qualities to seek for before trying his hand at designing. He understands later the grammar or the logic of the elements he is dealing with, as others learn how to construct a sentence, and, last, he discovers the meaning of composition, that is, how to put one's own ideas in order—common sense in designing. He learns how to eliminate from his composition all unnecessary elements, all that does not express the meaning of the programme, or the needs of a simple construction.

This mere logic of common sense, this sincerity in the means of expression and of building, forms all the technique of French tuition. It is that kind of technique which may not provide the student with ideas any more than with genius, but which allows him to express clearly his ideas. This technique is to the French mind (as mathematicians would put it) a condition which is probably not sufficient but necessary. The work in common in studios provides it.

The only drawback to the studios as they now exist, is that those students whom necessity does not bind to work in a practising office as well as the studio, do not get from it the necessary practical training. Up to about the middle of the nineteenth century, studios were nothing in France but the office of the master; so that the advantages offered by the School were only a complement to the practical experience gained in the office. I hope I am not indiscreet in saying that those responsible for the welfare of the French School are anxiously considering how to re-introduce a similar system in its organisation.

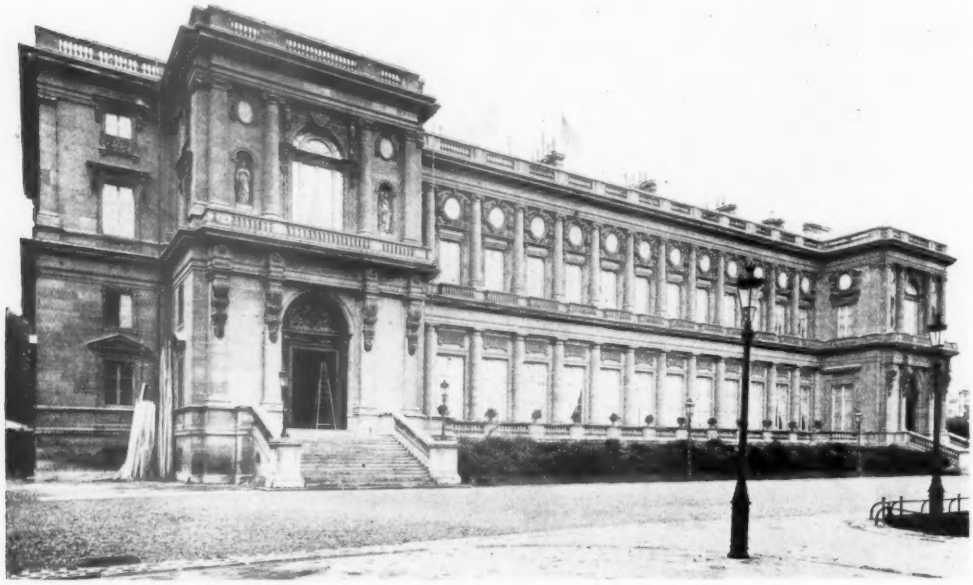
The School itself does not teach, but it keeps the interest alive in the studios—official or independent—by providing the different degrees and medals for which students have to compete; it also provides the Government diploma, prizes of a similar nature to your Pugin or Tite Prize, and above all, the Prix de Rome. I hardly need emphasise the value of this last institution, as you have shown your appreciation of it by creating lately a similar award in this country. I sincerely hope that it may soon acquire here the prestige which it enjoys in France, and that it will soon offer to the British laureate, besides a kind of glory which artists are naturally

inclined to appreciate, the prospect of work on his return from Rome, as this is such an important factor in the success of the French institution.

It struck me that, as this award is now for the first time being competed for in Great

Bibliothèque Nationale: "Study." (Sculptor, M. Barrias; Architect, M. Pascal.)

Britain, it would be interesting to show what a French Grand Prix really was, and I am able to show on these walls M. Hulot's Grand Prix of 1901. The author and M. Bonnat, the Director of the Beaux-Arts School, to which the drawings belong, have been kind enough to authorise this exhibition, and I am thankful to you for the assistance you have given me in obtaining their consent. The reasons which prompted me to select M. Hulot's work were, first of all, that the author does not require any introduction to you—as you have had the opportunity of studying the very interesting restoration he made of the ancient city of Selinonte.* Secondly, M. Hulot's scheme seems to me specially appropriate in this respect, that, although it is conceived in a very classical spirit, and studied nearly to a point for execution, it is presented in that brilliant manner which has been the characteristic of the school *projets* during the last two decades. M. Hulot has also boldly abandoned the academical tradition of designing his composition



Ministry of Foreign Affairs, Paris. (M. Lacornée, architect, 1845.)

on one centre. If one considers the character of the programme ("An American Academy in Paris"), this *parti* gives an appearance of reality particularly attractive. I have little doubt that we shall soon see in Paris an exhibition of British Prix de Rome—schemes which, whilst preserving the same technical value, will be a marked expression of the modern British conception of architecture.

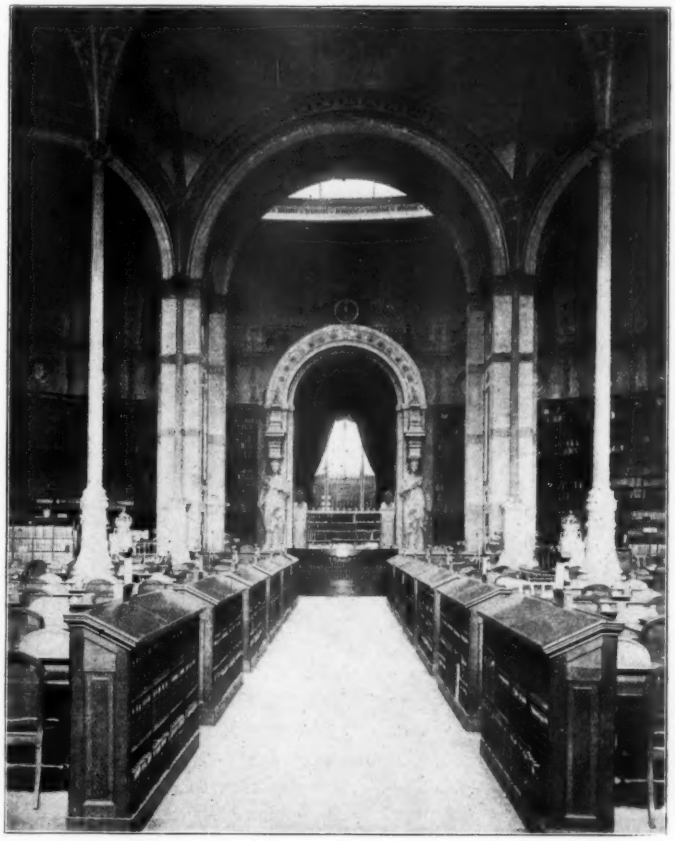
This new British Prix de Rome, and the necessary co-ordination between the other prizes offered to British students, will no doubt prove sufficient to induce them to work together and in greater numbers.

I do not think that I could conclude this study of the French School more efficiently than by translating these few words of the late M. Guadet—the last, perhaps, that this much

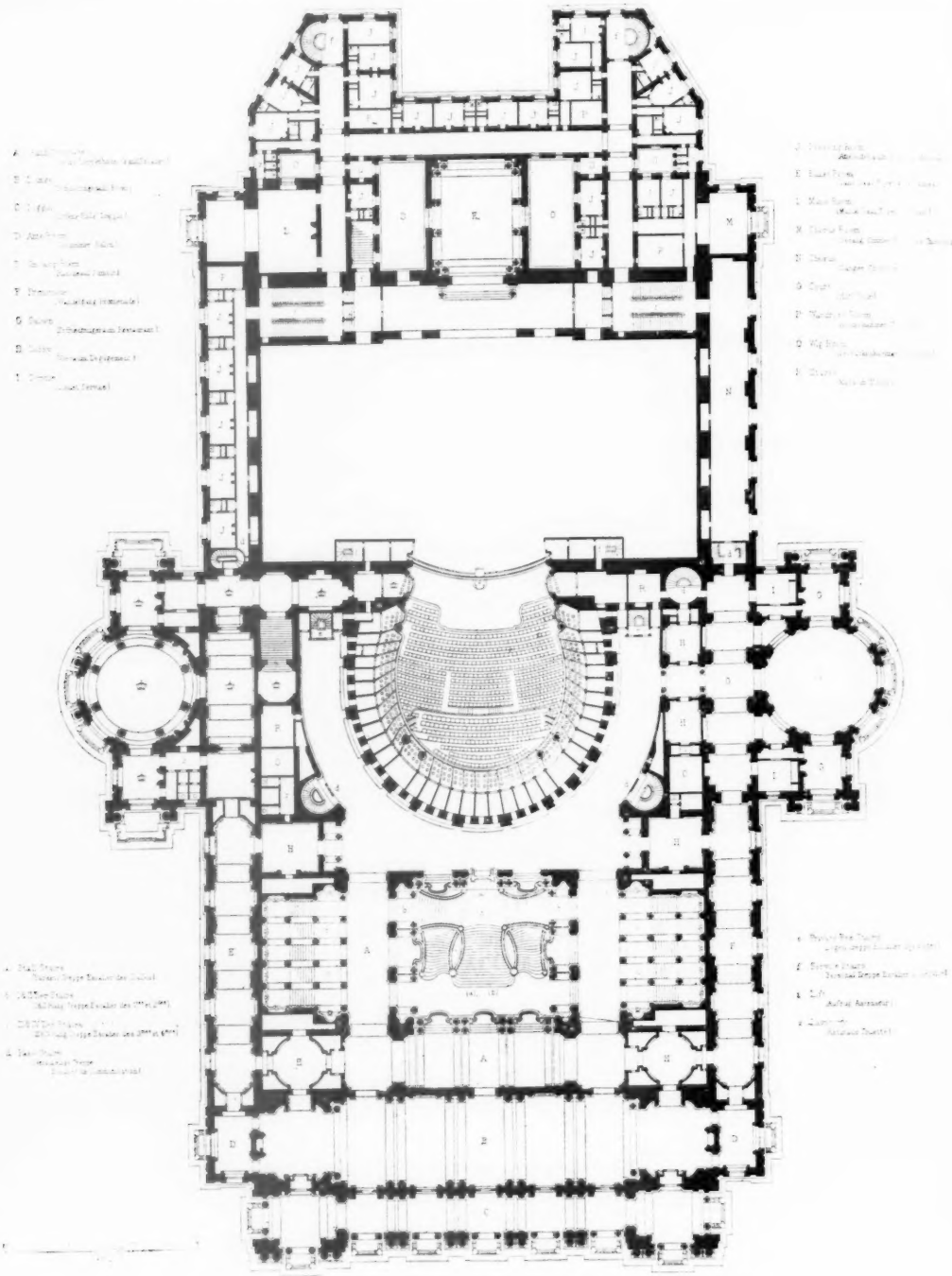
* See Journal, 25th July 1908.

regretted master wrote. Speaking of the School for which he did so much, he said: "I only wish that this School will remain true to its beautiful and noble mission, which is not to teach art, but rather to refrain from teaching. Its higher and more generous purpose is, whilst it offers pupils means of doing work, to bring together and put to fruitful competition all the teachings (absolutely free) of the most different, sometimes the most opposed masters."

Before showing illustrations of modern French work, I feel it is necessary that I should add a few words on the great help which the French architect receives from the different craftsmen and artists he has to employ. French modelling and carving, for instance, are a tradition of over a thousand years. Since Amiens or Chartres there has been an uninterrupted sequence of clever carvers always ready to fit themselves to the changes of style in the different periods. In the whole history of French art I am not aware of any period of slackness or bad taste amongst these obscure artists. In fact, at the decline of every great epoch, it was they perhaps who kept alive the interest we find in the refinement of the detail. They were never better than when the Gothic style was in its last days; their perfection was at its height during the Louis XV. period—they are as clever and sincere to-day as they have ever been. Gilding, metal chasing are arts purely and solely French, and are also as alive now as ever. Painters, joiners, and smiths are better than good workmen—they are artists—they not only execute, they understand colours or the proportion of the mouldings; they do not value the mere neatness of execution or its difficulties, such as very undercut carving or mouldings. They appreciate the detail which they have to execute in its essentials—that is, the beauty of its proportions and its decorative effect in relation to the whole work—they have taste. The difficulties of new methods or of new materials only excite their interest. The workmen of the modern industry of constructive steel-work, for instance, so readily lend themselves to the decorative effects required by architects, that experiments in that new branch of construction are nowhere easier than in France.



BIBLIOTHÈQUE NATIONALE, PARIS: READING-ROOM. (M. Labrouste, architect, 1845.)

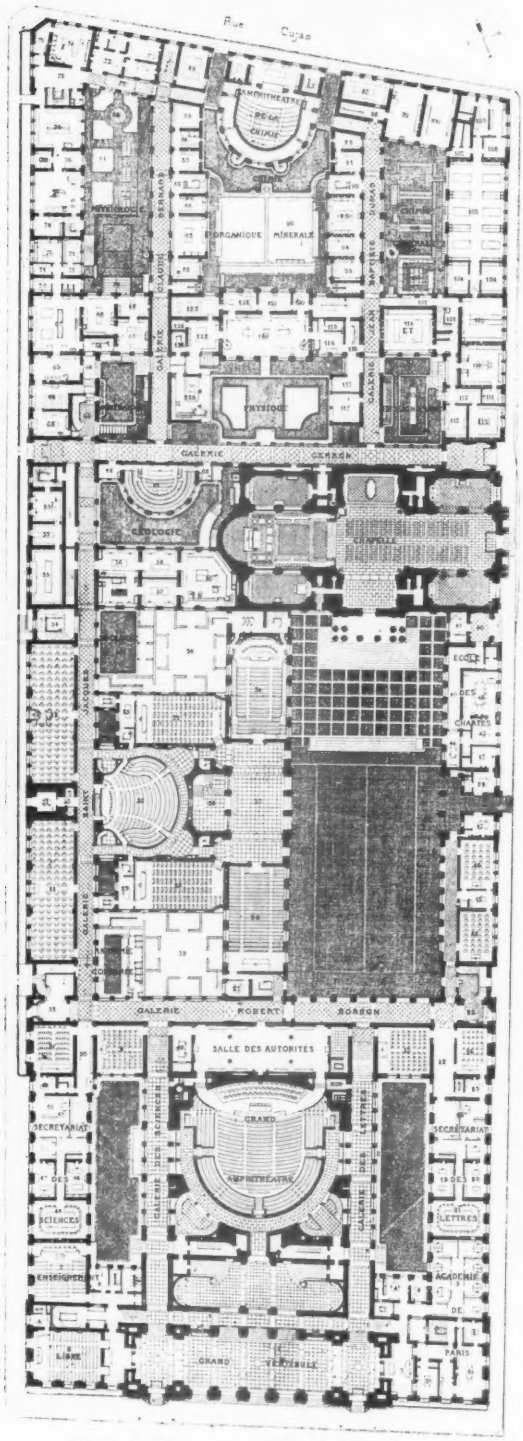


NATIONAL OPERA HOUSE, PARIS: PLAN OF AREA. (Charles Garnier, architect.)
From Edwin O. Sachs' *Modern Opera Houses and Theatres.*

One may add that France is one of the richest countries in building materials. She possesses the most complete selection of stone, from the hardest to the very soft, extremely well quarried. "Stereotomy," the science of cutting and fitting stone, is a French art steadily developed since the

National Opera House, Paris: Main Staircase. (Charles Garnier, architect.)

Gothic days, and its application to the most daring vaultings has by no means diminished since the introduction of steel-work or ferro-concrete. Ferro-concrete itself, if not altogether of French invention, has, however, received in France its earliest applications. The high scientific standard



THE NEW SORBONNE GROUND FLOOR PLAN
(M. Nénot, architect, 1885.)

of French engineering is well known, and architects receive the most ready co-operation of engineers, some of whom, being artists as well as scientists, have studied architecture at the Beaux-Arts, and obtained the diploma. One will realise, therefore, that French buildings of to-day may be offered to the study of the practical builder quite as well as of the artist.

But, last of all, the co-operation of architects with sculptors and painters is now, as before, so intimate that one sometimes hesitates as to whom to give the credit —the architect, the sculptor, or the painter. May I give a few instances amongst hundreds in support of this?

The "Departure for War," by Rude, on the Arc de Triomphe. The figure which dominates the group is a personification of the French National Anthem, "La Marseillaise."

"Dancing," by Carpeaux, on the National Opera.

"La Flore," by Carpeaux—Tuileries.

"Study," by Barrias, on the new part of the National Library in course of construction under M. Pascal and M. Recoura [p. 321].

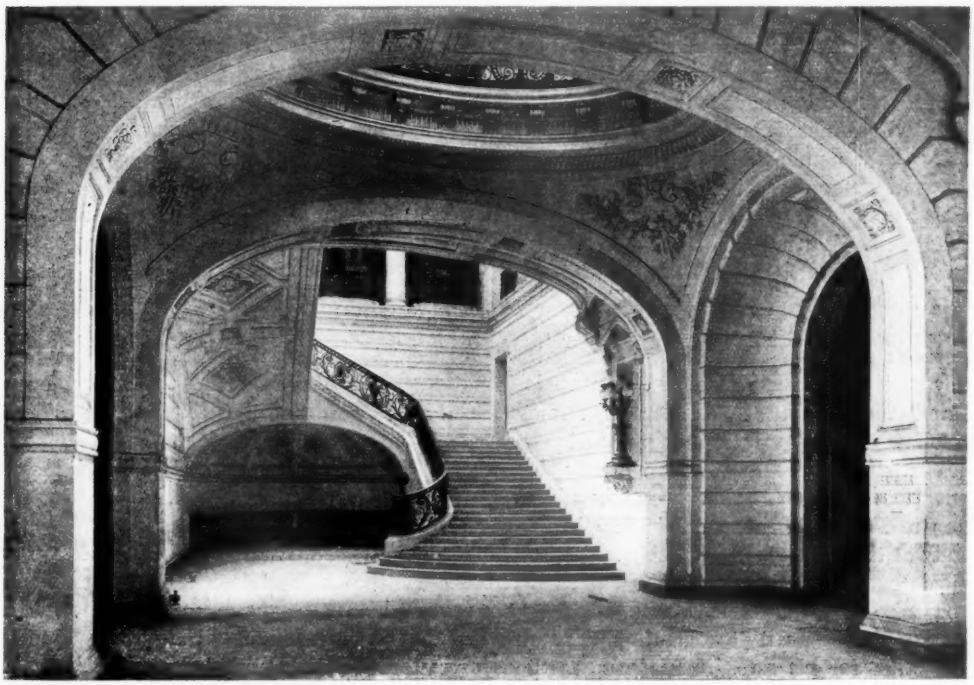
"The Sacred Grove," perhaps the masterpiece of Puvis de Chavannes, decorating the large hall of the Sorbonne by M. Nénot [p. 317].

The painted decorations of the Opéra Comique, of the Sorbonne, of the Paris Town Hall are so numerous that these buildings can well form a complete gallery of contemporary painting. Moreover painting appears so intrinsic a part of French decoration, that *cabarets* at Montmartre have their walls painted by such spirited draughtsmen as Willette, Steinlen, Léandre. A public house in the Rue Bonaparte has a sign-post painted by Willette.

I have attempted to show that the French are a people naturally disposed to classical architecture, that architects receive in France a training adequate to their aspira-

tions, and that in practice they receive the necessary help from the builders, the craftsmen, and the artists whom they have to direct. What results modern architects have been able to achieve under such favourable conditions I will try to explain in reviewing the various phases of architecture during the last century.

I should like to consider the history of modern French architecture as beginning exactly in the year 1665, the date when Bernini, who had started rebuilding the Louvre, was sent back to Italy, and when the French architect, Perrault, appointed in his place, started his famous colonnade. Colbert and Louis XIV. were then giving the *coup de grâce* to French feudalism. Did those shrewd politicians feel the new spirit which was going on in the studios, or was it part of their policy that France should have an art of its own? They broke, however, the traditional artistic rela-



THE NEW SORBONNE: MAIN STAIRCASE. (M. Nénot, architect.)

tions with Italy. Perrault served them well—his colonnade was better than a fine monument, it was the affirmation of that modern principle, the one order, with its accompaniment of the base story and the possibility of the attic. Raffael had a suspicion of it in designing the Palazzo Vidoni in Rome, and Palladio and Sanmicheli in their various attempts applied it sometimes; but it is at the Louvre that it reached the importance of a principle. Classical designers have lived on that principle ever since. Mansard the younger followed it with possibly less happy proportions at Versailles, and it received a triumphal confirmation when Gabriel built those two gems of buildings on the Place de la Concorde. It was a short brilliant period—just the reigns of three kings—one of those sparks in the history of civilisation, the brightest, perhaps, ever since those fifty years or so during which perfection had been reached in Athens two thousand years before. In the meanwhile (the eighteenth century) Athens, which had been forgotten, was slowly being discovered; travel-

lers were bringing wonderful reports. For the first time in history, men understood that something had been done before, of a beauty much greater than they had ever dreamt in doing their own beloved work. They lost that enthusiasm of self-confidence necessary to good work. From artists that they were, they became archæological pedants. They were so in France as everywhere else during the first quarter of the nineteenth century. They had before played at being Romans as amateurs, and in doing so they had remained themselves ; they were going now to be Greeks and Romans in earnest, and that clumsily. They were going to be more Roman than the Romans themselves, and their buildings showed a severity and a dullness unknown to antiquity. Talent was not lost, but the simple-mindedness of the artist was. The Prix de Rome schemes of the early nineteenth century were of a noble severity. The gigantic plans had to take the lines of the Roman Forum of Trajan, and every building to recall the familiar outline of a basilica. Bare, plain walls a quarter of a mile long were pompously relieved by remarkably well-drawn windows fifty feet apart, and surmounted by a delicate cornice carefully shaded—the drawing of which alone must have taken a week to execute.

Far from following the traditions of the eighteenth century, the art of that period was then profoundly despised, or even hated. When the National Library was being enlarged, the Louis XV. work was pulled down with delight ; canvas from ceilings painted by Boucher was used to protect floors from plaster and mortar, and it is probably due to the alterations of that period that you possess in the Wallace Collection a wrought iron and bronze staircase railing from that monument. We must not tax these men with vandalism, as it seems to be in the nature of men to despise the work of their immediate forefathers. We gladly destroy now Early Victorian work which the next generation will respect.

Roman and Greek models, however, soon proving insufficient, Italian Renaissance work became a source of inspiration, although buildings were perhaps no more exactly Italian than they had been exactly Roman. Archæologists, hard at work studying and classifying every period of art, provided architects with new models to such an extent that it becomes difficult to follow the various influences and divide them into different groups, as years, styles, and men's ideas mixed themselves in such a way that they could not be separated. But a few important facts became dominant—mediæval buildings began to attract attention. There has not been in France exactly what is called here a Gothic revival, but a great name dominates the study of the art of the Middle Ages—that of Viollet-le-Duc. To all appearances Viollet-le-Duc failed to obtain practical results from his efforts. He thoroughly failed in his endeavours to reorganise the Beaux-Arts School. His proposed reforms had been sanctioned by Napoleon III., but it brought nearly a revolution, as, during the few lessons he gave, he had to seek police protection for his safety. His own methods of restoration have been condemned since as being too radical, and in the buildings he himself erected he showed that his creative power was not to be compared with his critical power. As to the isolated attempts in Gothic style of his followers, work was never produced to approach in artistic value, as well as in importance, such buildings, for instance, as your magnificent Houses of Parliament.

The only practical achievement of Viollet-le-Duc has been the creation of those governmental departments—the " Edifices diocésains " and the " Commissions des Monuments Historiques,"—which have saved many old French buildings from destruction. Nevertheless, the influence of Viollet-le-Duc has been enormous—being much attacked, he has been much studied, and his captivating writings have been read by every architect. As he professed not merely a revival of the Gothic forms, but a theory of rationalism and of sincerity towards means of construction old or new, and as at the same time the iron and steel industry was providing new ways of building, these principles have become the dominating pre-occupation of French architects. Even such classical designers as Labrouste attempted as early as 1845 to give proper architectural treatment to

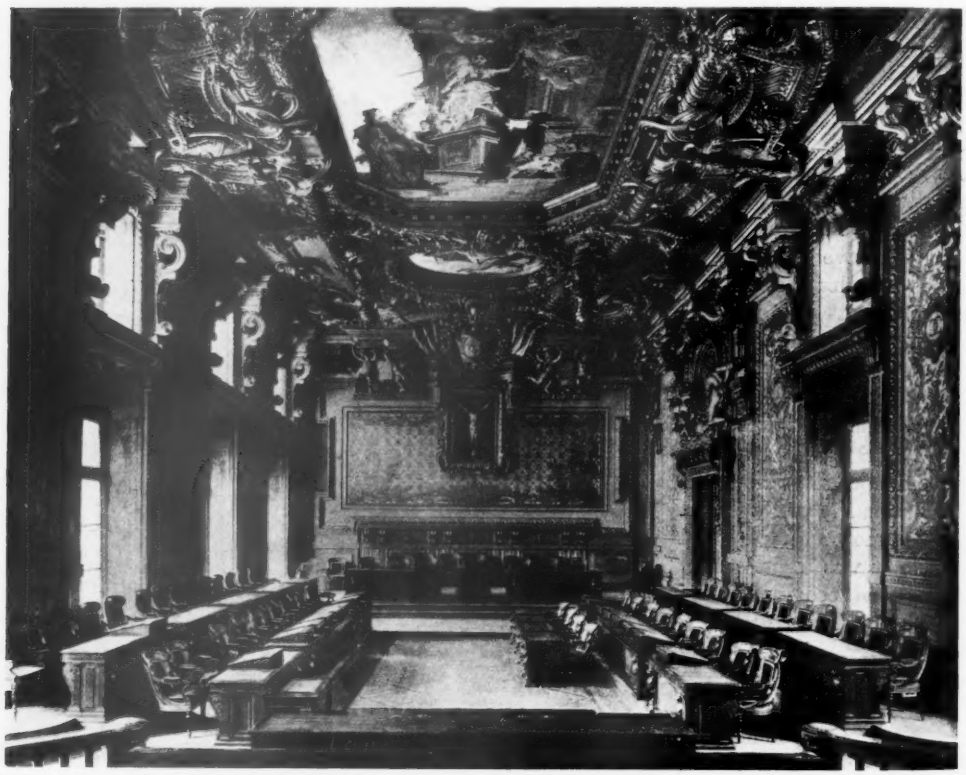
steelwork. The lecture rooms of the St. Genevieve Library and the National Library are classical examples of these early efforts.

The greatest part of the Beaux-Arts school built by Duban showed similar tendencies, and I regret that I am not able to show a better illustration of it than its central cloister. The Palais de Justice, by Duc, conceived in a more modern way of interpreting Greek models, although it does not introduce steelwork, is particularly interesting from the new principle of stone vaulting applied to its "Vestibule de Harley." This vaulting is neither Gothic nor classic, but the analysis of its constructive elements, which is thoroughly modern, would probably have proved dangerous to a less clever artist than Duc.

INSTITUT OCÉANOGRAPHIQUE, RUE SAINT-JACQUES, PARIS. (M. Nénot, architect.)
From *L'Architecte* (Paris 1911).

Whilst the nineteenth century was advancing in years, France had been enjoying a fairly long period of peace, during which she recovered from the wars of the Revolution and of Napoleon. She became rich again, and prosperity was at its height during the Second Empire; Napoleon III. was creating a new nobility, chiefly nobility of finance. This new society—which pulled Paris down, replanned it, rebuilt it; which created Biarritz, Nice, and Monte Carlo—required an architecture to express its thirst for pleasure and extravagance. The architects of the period had full opportunities of satisfying it, but the greatest opportunity of all, however, was given Garnier when he built the new Opera House. Napoleon III. and the Empress showed the interest they took in the building by themselves sending in a scheme at the competition. They did not produce a plan, which they considered superfluous, but their perspective design marked their intention that the

architecture should be French; it represented the "Garde Meuble" of the Place de la Concorde, altered at the last moment for Perrault's colonnade of the Louvre. Garnier tried to be as French as he could after nearly a century of Greek, Roman, Italian, and Byzantine work, and after his own restoration of the Greek temple of Athena at Ægina. The Opéra, at any rate, has been the magnificent expression of that exuberant period. It is to France what the Houses of Parliament are to England. Following an age of adaptation to forms and methods of antiquity, both monuments are the sign of the return of both nations towards home traditions. England has looked for them further back than France; that is the



THE COUR DE CASSATION, PARIS. (M. Coquart, architect.)

only difference. To us French architects, the plan of the Opéra [p. 324] is the perfect type of modern planning. It is held in France in such admiration that it has appeared as the necessary accompaniment to the bust of Garnier in the monument erected to his memory some ten years ago. This monument was designed by the respected master, M. Pascal, who was Garnier's collaborator at the Opéra. The bust is by the sculptor Carpeaux.

Garnier, who had been travelling all over Europe studying modern methods of theatre planning, found no better model than that classical French masterpiece, the theatre of Bordeaux, built by Louis exactly 100 years before. Important features were adapted from Bordeaux, such as the main lines of the principal staircase and the ingenious treatment of the cupola on pendentives covering the auditorium; but where the two artists differed, and where Garnier's in-

clination towards modern rational planning found expression, is in the treatment of the exterior outline of the two monuments. Whereas Louis framed his composition in an unbroken rectangular block, Garnier expressed outside every element of his composition :—the foyer and its

THE LOUVRE : DECORATIVE ARTS GALLERY. (M. Redon, architect.)

loggia on the façade, then the cupola of the auditorium, and higher up the stage crowned by the figure of Apollo. The two side pavilions are : one the State entrance, the other the public carriage entrance. Absolute sincerity in distributing the masses so as to express their purpose,

joined to a perfect classical unity in the grouping of these masses, this is the modern lesson offered by the Opéra. Other influences were at work; the study of early French Renaissance brought the originality and the richness of treatment of the details—the latest discoveries as to the details of Greek work influenced many motives of decoration—and, last, the theory that colour should not be excluded from the exterior treatment of architecture found expression in the introduction of differently coloured marbles, of bronze, and of gilding. The Cercle de la Librairie is another instance of Garnier's personal manner.

The requirement of richness and also the return to French Renaissance work is well expressed in the enlargements of the Louvre and of the Tuileries, by Lefuel; his Pavillon de Flore is a familiar type of the architecture of this time.

The Fountain of the "Observatoire," by Carpeaux, is also a typical monument of the same period which artists love and of which France is proud.

The re-planning of Paris, however, elaborated by Baron Haussmann and the engineer Alphand was, perhaps, one of the most important architectural undertakings to the credit of Napoleon III. Town planning was not altogether a novelty in France, since towns like Nancy and Bordeaux, formed in the eighteenth century, are classical models which can still be most usefully studied by modern designers; but the modern variety of treatment, the utilitarian considerations, as well as the confident taste shown by the builders of the Second Empire, prove how the old French tradition could well adapt itself to modern needs. What is most remarkable and characteristic of the French taste is how the new work fitted itself to, in fact continued, the schemes begun by previous generations. That extraordinary axis which, starting at the Louvre, goes on westwards for five miles, is the work of two centuries. It was not a preconceived plan, as Bernini and Perrault in working out the solution to the awkward centre of the Louvre and Tuileries had certainly no idea that it would form a basis of work for about a score of future monarchs and different political régimes. Each stone added to the development of this axis has been an improvement to it: the Place de la Concorde first, then the Champs-Elysées, then the Arc de Triomphe, then the Avenue de la Grande-Armée. To follow it is a lesson in French history; it is also an object of wonder how so many different kings, emperors, republics, municipalities, commissions of improvements, and so on, have all worked with such unity of purpose for the betterment of what had been done before.

Napoleon III. developed the "Quartier de l'Étoile"—planned it as a star the centre of which is the Arc de Triomphe; connected it to the north of old Paris by the Boulevard Haussmann; encircled Paris with a new line of boulevards, and created converging avenues, such as the Boulevard de Strasbourg and Saint-Michel, which, while serving his strategical purpose, gave Paris a circulation without which it would have soon become congested. The creation of the Bois de Boulogne to the west, the Bois de Vincennes to the east, the Parc Monceau in the centre, the Buttes Chaumont to the north, gave healthy lungs to this compact city. These alterations gave rise to a considerable amount of building and land speculation; but to attempt to prevent altogether speculation in such undertakings is perhaps to prevent oneself from carrying them to success.

The Franco-German war stopped the tendencies to extravagance of the Napoleon III. period; France set to work earnestly to repair the damage of war and prepare a new prosperity. She built more than ever, and, but for a few exceptions, architects continued to take their inspirations from the French work of the early or late Renaissance.

The Hotel de Ville was rebuilt by Ballu on almost exactly the same lines as it stood before the war. The Château de Chantilly, rebuilt by the late M. Daumet in the manner of the early French Renaissance, is typical of the refined, and at the same time very personal style of this much-regretted master.

The School of Surgery was enlarged by M. Ginain in a Néo-Grec style, which is probably more French in appearance than had been the work of Hittorf at the Gare du Nord, or of Duc at the Palais de Justice. The Musée Galliera, also by M. Ginain, illustrates the same aspirations of this learned artist.

The Musée du Trocadéro, by Davioud, at the time of the Exhibition of 1878, is an interesting attempt in foreign style, and in treatment of modern means of construction in its interior work.

The church of Saint-Pierre-de-Montrouge, by M. Vaudremer, and the Basilique du Sacré-Cœur," by M. Abadie, sometimes called Byzantine, are rather a personal expression of style, inspired largely by the Romanesque buildings of the South of France.

The Sacré-Cœur is a remarkable piece of execution; the fitting of the extremely hard stone with which its walls, its roofs and its double cupola are built is a masterpiece of stereotomy.

The Opéra-Comique, by M. Bernier, is a refined piece of architecture which marks a practically complete return to the classical French tradition.

The Rubens room at the Louvre and the Musée des Arts Décoratifs, by M. Redon, are typical models of modern architectural decoration. M. Coquart in his decorative work to the Cour de Cassation or High Court of Appeal has no doubt been inspired by the late Venetian ceilings of the Palace of the Doges, but I would point out that whilst the composition is quite as decorative, the treatment of the details and the execution are a great deal more refined than the Venetian work.

THE GRAND PALAIS, PARIS. (M. Henri Deglane, architect, Paris.)
From "S.A.D.G." (Paris, 1911).

One of the most important monuments France found necessary to remodel and enlarge was

the Sorbonne, or University of Paris, of which M. Nénot is the architect. M. Nénot's career is worth recalling. Still a child, he volunteered in 1870 and deservedly won the high distinction most honoured by the French, "the military medal." Prix de Rome in 1877, he competed during his sojourn in Italy for the monument which Rome was going to erect to Victor-Emmanuel. Of some 300 competitors he obtained the first prize by sixteen votes out of seventeen. The execution, however, was not guaranteed to the winner, but he was recompensed on his return to France by the building of the Sorbonne. He was twenty-seven.

Pont Alexandre III., Paris: Pylon.
(MM. Cassien-Bernard and G. Cousin, architects, 1900.)
From "S.A.D.G." (Paris).

The plan of the Sorbonne [p. 326] is one of the most businesslike plans I know—at the same time it shows essentially those very French qualities of symmetry and monumental treatment necessary to the dignity of such a building. The ease with which M. Nénot has surmounted the complications and difficulties of the problem seems to me admirable. Even the chapel of the Sorbonne, built under Louis XIV., comes into the scheme as if part of an original conception. Besides being a remarkable piece of engineering, this plan is a model of simple unity and of sincerity. Everything is true in this building, where every mass expresses the purpose or the mechanism of the plan.

The hall of the Hotel Meurice and the Institut Océanique [p. 329] are two of M. Nénot's latest works. The latter supports his theory that the architect is quite justified in submitting himself to the wishes of his client with regard to style, as style is a language, and a man can talk in any language he likes, provided he expresses himself clearly and sensibly in it.

By degrees, French architects had returned to a purer submission to the French tradition of the eighteenth century, and they had completely come back to it at the time of the International Exhibition of 1900. Although the permanent buildings of this period are probably well known to you, I shall nevertheless rapidly recall them to your memory by illustrations.

The Grand and the Petit Palais are no copies of any eighteenth-century buildings; they are each in a different way quite personal, but they frankly illustrate this return to the classical tradition. The group of sculpture on the pier illustrated of the Grand Palais [p. 333] is by M. Verlet.

May I specially point out the staircase of the Grand Palais, not so much as an illustration of the great talent of M. Deglane, but as an instance of the French steel manufacturer's successful efforts in carrying out the most elaborate architectural designs? The whole staircase, including the steps, is of metal. The steel nave is also most elaborate in the architectural treatment of the details.

The Petit Palais, a great success in the mind of the Parisian, shows those refined qualities of treatment of the detail which its author, M. Girault, no doubt owes partly to the influence of his master, the late M. Daumet.

May I point out how the decoration of the Pont Alexandre III. by MM. Cassien-Bernard & Cousin is a sincere expression of the daring piece of engineering which forms its structure, not omitting the steel pivots which take the place of our old heavy keystones? The sculpture with which the architecture of the bridge is enriched is by such men as Falguière, Fremiet and Marqueste.

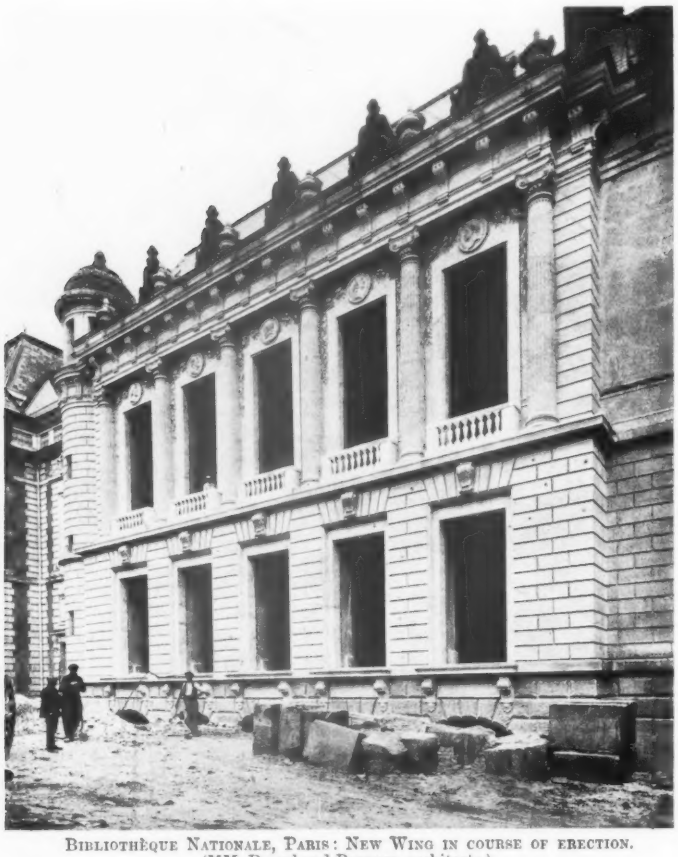
CHAPELLE NOTRE-DAME DE CONSOLATION, RUE JEAN GOUJON.
(M. Guilbert, architect, 1900.)

The attempt at steel architecture in the Quai d'Orsay station by M. Laloux is also well known to you.

The Chapel of Consolation, commemorating the disastrous fire of the "Bazar de la

Charité," by M. Guilbert, is a particularly well-marked return to the Louis XVI. style, especially to that type so characteristic in the drawings of Delafosse.

The latest addition to the National Library, from the designs of M. Pascal, now being completed by M. Recoura, shows how the same artist, although keeping his strong personality, has modified his style from that of the Opéra, where he was an important collaborator, to a style nearer to the classical French tradition. It appears to me particularly interesting to refer to the "Château de Doux" by the same master, as illustrating the fact that monumental town architecture does not prevent architects treating country domestic architecture in a spirit similar to the British conception of it; the château in question, built in Auvergne, would not be out of place in Scotland.



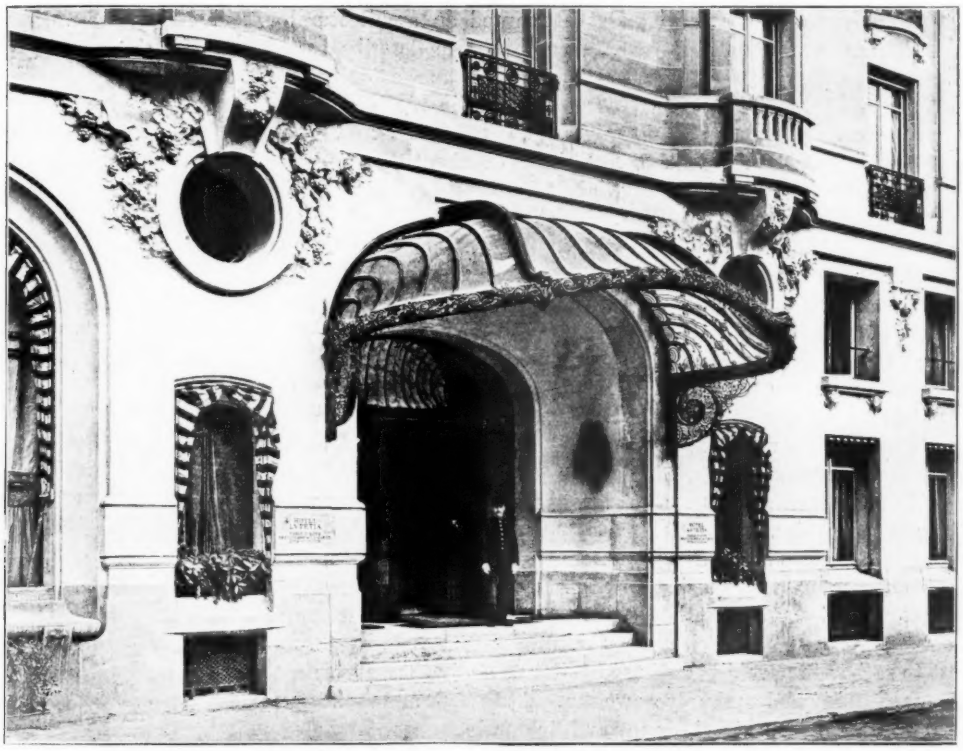
Bibliothèque Nationale, Paris: New Wing in course of erection.
(MM. Pascal and Recoura, architects.)

The few examples I have been able to present of the French buildings of the nineteenth century may have been sufficient to show that if French art has passed through influences or means of expression as varied as the Greek manner or the Gothic—the Byzantine or the early French Renaissance—it has not, at any time, loosened the rigidity of its love for orderly composition; and I feel this is where during the nineteenth century France has greatly differed from Great Britain. Archæological discoveries have put a severe test on the natural tendencies of the two nations; whilst France has strictly adhered to her love for orderly grouping, the Gothic revival has in England played havoc with the classical traditions dearly brought together by her architects of the seventeenth and eighteenth centuries. The British designer seems to have seized with relief that opportunity of studying building problems in accordance with his taste for analysis of detail; and even now, when most of you have acquired again a profound knowledge of classical elements, in many minds the battle of the Gothics and the Classics is not yet settled.

The British may be right, and possibly the French are wrong. Classical composition produces work which is complete and definitive, but the study of history teaches us that no man's work is definitive. The more we advance the quicker human institutions evolve. Composition

cannot foresee nor provide for these future evolutions, the direction and limit of which it would be unwise to contemplate. On the contrary, the Gothic analysis of detail allows these changes and additions brought about by altered requirements. Which of the two systems is right is a problem which the future alone will solve. As to the direction France is now taking, this is a question too dangerous to face. I shall only try to present just as they are a few facts which I cannot ignore.

There are signs that France is tiring of uniformity. Some ten years ago the municipal regulations of Paris, for the avowed purpose of obtaining variety in the distribution of the façades, were altered to allow greater projections for balconies or bay windows; they gave facilities for



Hôtel Lutetia, Boulevard Raspail, Paris. (MM. L. Boileau and H. Tauzin, architects.)
From *L'Architecte*, 1911.

the erection of dormer windows or turrets to add interest to the sky-line of street architecture. Villas, or little "châteaux," have abundantly expressed this modern research for picturesque grouping, and the design now before you of M. Hulot, with its effort towards realistic composition, has been greatly appreciated as being a relief after the stiff academical grouping of the early nineteenth-century Prix de Rome.

L'Art Nouveau seems to have taken in the mind of the critics of France, or of those who are anxious for her reputation, an importance which I fail to notice in France herself. Somewhere about 1895 a few designers, anxious to attract attention by a quicker way than their knowledge would naturally permit, sought to adopt that kind of originality which consists in

putting one's coat on the wrong side out! In the period of preparation for the 1900 Exhibition frivolities were permitted; this style was found amusing, and obtained in fact a certain success, but as the shortest jokes are considered the best in France as well as in England, l'Art Nouveau disappeared as quickly as it had come—it is already a matter of the past.

Some architects, however, have made earnest and sincere efforts in the search for a style suited to modern ideas; they are not to be confused with the partisans of l'Art Nouveau. Most of them belong to the small but very learned group of followers of Viollet-le-Duc, and they are headed by no less a man than M. de Baudot, the respected collaborator of Viollet-le-Duc, his successor in fact, as he continues to give at the Musée du Trocadéro the lessons of architecture which Viollet-le-Duc attempted to give at the Beaux-Arts School. At the church of Saint-Pierre-de-Montmartre M. de Baudot attempted an architectural treatment of ferro-concrete, of which he is a fervent advocate. Nor could one describe as *Art Nouveau* the attempts of M. Plumet, attempts at using Gothic methods without actually copying any elements of detail. These efforts I would compare to those of Mr. Philip Webb in this country.

New art, however, has lasted longer in Central Europe. It is there taken seriously, and great hopes are founded upon it. Two French architects of the younger generation—MM. Boileau & Tauzin—have found it interesting to adopt this mode of decoration in the Hôtel Lutetia they have lately built in Paris [p. 337]. The treatment is refined, and I see in this attempt a proof of the adaptability of the talent of its authors. The new "Magasins du Printemps," by the late M. Bigot, are treated in a manner characteristic of this designer.

Amongst the younger men, I must mention M. Tony Garnier, who professes his profound disdain of all architectural treatment. He obtained the Prix de Rome, however, I believe, in order to show that this disdain was not the outcome of incapacity, but that he was as clever as anyone else, if not more so. He now puts his theories into practice in building abattoirs and hospitals for the city of Lyons. M. Tony Garnier designs his own steelwork, and there is at the abattoirs a steel nave 250 feet in span. His own house of steel and concrete covered with rough-cast has appearances which, I feel, would not be foreign over here.

Theories, ideas, are as varied as they are numerous, a great deal more so than I can express. The real tendencies, however, which slowly lead the world onward are possibly those which do not express themselves in words and those which we are too blind to discern, but if words of wisdom are necessary as a conclusion to this study, they were given to me in a conversation with M. Nénot. I will try to translate them as accurately as I can remember them: "We must not trouble our heads too much about the future; we have to work for the present—let us do our best to satisfy the problems offered us—let us study the programme and the means of construction as sincerely and as simply as we can. As to style and architecture, the less we do of that the better. If we have any style or any architectural manner of our own, let it be (in the same way as Monsieur Jourdain, of Molière fame, spoke in prose) without knowing it."

DISCUSSION.

Mr. Reginald Blomfield, A.R.A., *President*, in the Chair.

Mr. H. HEATHCOTE STATHAM [*F.*], in proposing a vote of thanks to Mr. Billerey, said that the subject of his Paper had been one of great interest to himself for many years. For nearly a quarter of a century—24 years, to be exact—every May had found him strolling in the vast unpeopled solitudes of the architectural rooms of the Paris Salon. He was sorry to say that that part of the Exhibition was even more neglected by the spectator than was our own architectural room at Burlington House. He had found nearly always that the central object in that part of the Exhibition was a great series of restoration drawings of some ancient monument. Looking back over his notes he found in 1885 M. Laloux' magnificent set of the Altis at Olympia. It was the work of a man who was at the same time a landscape artist and an architect. In 1888 there was M. Deglane's Palace of the

Cæsars; in 1889 M. Esquié's Hadrian's Villa; in 1901 M. Tournaire's Delphi. In 1904 there was a remarkable set by M. Patouillard of the restoration of the Island of the Tiber, which the Romans had the curious idea of making into the semblance of a gigantic ship. There were some records of it in Piranesi's drawings still. Then in 1898 there was a most remarkable set of restoration drawings of the cathedral at Rodez by M. Pailhès, with a perspective view in which every stone was treated as a separate problem, and which was calculated to fill English draughtsmen with mingled feelings of ambition and despair. It was sometimes said by critics of the École des Beaux-Arts that this kind of work was not a very good preparation for practical architecture; but it had this effect, he thought, it necessitated a thorough study of some of the greatest remains of antiquity, and studies of this kind filled the mind with ideas of a high standard. And in France this was bound to lead to something. Whenever they saw a man's name to a great set of restoration drawings they would be sure five or six years afterwards to see his name as architect of an important building. The Government never forgot him. There was something, also, in the great scale of things in Paris that must affect the architectural feeling. Look at the parish churches for example. Turn into such a church as that of St. Roch, or St. Sulpice, or Hittorf's grand basilica of St. Vincent de Paul, with its four rows of great marble columns—these were but parish churches, but they were on the scale of what in England would count as a second-class cathedral. That was one very great influence which their early studies had upon French architects; they had the example always before them of things on a large scale. What was the effect of that scholastic architecture on the tendency of architecture in modern times? He noticed in going through the Salons year after year that they were largely filled with Prix de Rome designs and designs by students of the École, all of them very good; but they rather impressed him as if he were seeing the same things over again. There was that drawback to this scholastic view of architecture, that while it kept everything up to a certain high standard, and was always dignified, it lacked variety. Among the buildings which had been referred to he would mention two. One was the Musée Galliéra, one of the most beautifully designed buildings of modern times, and representing very truly the best French treatment of classical architecture. The other was the Petit Palais, though he did not like all the outside details. No mention was made of its plan, but, as far as he knew, the plan was a new conception in architecture, and an admirable one. He admired what Mr. Billerey said about the tendency of the French, even in small buildings, to go to work to make a synthesis of the building, to work upon a symmetrical plan, instead of the way in which smaller buildings were so often put up in England, putting the rooms together in a way which was convenient for the interior traffic, but letting the general design come together as it would—picturesquely sometimes; but the French system he thought was more like art. On the other hand, he suggested that we were better than the French in one way, and that is, that the picturesque had something to say. There were three sorts of modern French building which he could not sympathise with. The first was the lycées or Government schools. They looked like mills; and everyone who had read Alphonse Daudet's description, in "Le Petit Chose," of his own experience of them would feel that the building was just an outward expression of that cast-iron system of education. A capital education it was, but it was not given in a very humanising sort of manner. In England one felt that schools should be made homelike; they never seemed to have got that feeling in modern France; the schools were what he should call educational mills. The second class of building he was out of sympathy with were the Gothic churches, judging by the illustrations he had seen of them in the Salon. It was curious that though France was undoubtedly the cradle of Gothic architecture, the feeling for Gothic should have died out there; in the designs of modern country churches they had a sort of detail which to us in England was exceedingly disagreeable. The third type of building was, in spite of the one admirable example which Mr. Billerey had shown them, the French country house. When one saw "Maison de Campagne" in the catalogue, one knew what to look for: a house that seemed all fireworks. There was apparently no repose about them at all. In this respect he thought we might claim something for England; we had the sense of the quietly picturesque. He sympathised with what Mr. Billerey said about the importance attached to sculpture and painting as decoration in France; he was one of the greatest admirers of the sculpture by Rude, "The Departure for War," on the Arc de Triomphe. It was a pity the sculpture on the west side was more commonplace. But had there not been a little too much "vigour" in the French sculpture decoration? He thought it began with the 1900 Exhibition. They were apt to see figures with legs and arms sticking out on the cornice as if they were flung there by the wind; they were not sufficiently connected, architecturally, with the building. Puvis de Chavannes' paintings in the Sorbonne were the very perfection of decoration; his low tone of colour was subordinated to the architecture, and the design had a calm kind of style which prevented it from disturbing the architectural lines. But on that subject he would ask Mr. Billerey whether he could explain why, when the French determined on decorating the Panthéon, they turned loose their eminent painters, all used to different styles, and let them do what they pleased, without any central

motive at all, so that it was now a museum of curiosities. He could not conceive how, in France of all places, that could have been done. He would venture to suggest that while French architecture was superior to ours in their system of co-ordinating design, it wanted a little more reticence in detail. He remembered at the time of the Architectural Congress in England a distinguished French architect went with a party to Greenwich, and remarked when he saw Wren's very plain attic over the Hospital that it was "brutal." He could understand a French architect feeling that. But might not some of them say, in return, even in regard to some of the illustrations shown that evening, that they were too florid? Among the buildings which seemed to him to be perfect were the School of Medicine and the Musée Galliéra, both by the same architect. These were real architecture, buildings which suited their purpose. If the French architects could keep to that intellectual habit of symmetrical design, and curb a little their exuberance in ornament, he thought they would come very near to showing us perfect modern architecture. There were many lessons we could learn from French architects, and perhaps there were one or two they could learn from us. Mr. Billerey's paper had been most interesting, and he was sure the Meeting would join with him in thanking him for his admirable exposition of the subject and for the illustrations he had shown them.

Mr. EDWARD WARREN, F.S.A. [*F.*], in seconding the motion, said that Mr. Billerey's Paper was an admirable and most lucid exposition of current architectural thought and methods in France, and of unique interest as the expression of the personal view of an architect highly trained in France and imbued by race, by environment, and by tradition with the ideas of his nation, but who for the last few years had extended his appreciations and modified his impressions by intimate contact with English architecture and architects. Mr. Billerey was in the happy and unusual position of being able to regard the spectacle of both modern French and modern English art from within and also from without, a great advantage in forming a complete estimate, for, if it were true that "lookers on see most of the game," it was also true that participants were most familiar with its happenings. Mr. Billerey had been both able and, happily, willing to give them the benefit of his double view, which he (Mr. Warren), for one, had found to be extremely interesting and stimulating. They were all of them, he hoped, lovers of France, but lovers were constantly critical; where there was such an immense deal to admire, it was permissible to find something at any rate to question. What struck him as the chief excellences in civic architecture as he saw it upon his repeated visits to France, were the prevalent sense of symmetry, to which Mr. Billerey had so fully alluded, the feeling for proportionate mass and scale, the general elegance and high finish, and the almost invariable sense of style—not archaic style, by no means always pleasing style, but a definite and pervasive character. In public buildings in large or even in smallish provincial towns, in Hôtels de Ville, Palais de Justice, Mairies, and public offices of all kinds, there was a definite civic type, sometimes harmonious and dignified, sometimes academic and stereotyped, frequently formal, stiff and cold. But there was almost always a sense of scale, an obvious civic intent, and a presentment of robust and imposing mass. The French handling of a public monument, commemorative, symbolic or other, almost invariably presented, in its bold salience, and courageous scale, and sometimes in its fearless defiance of static conditions, a tremendous contrast to the respectable little sculptural timidities we had to accept in Great Britain. And the French Municipality, which ordained such buildings or monuments, was generally careful also to ordain a sufficient and imposing site, to arrange for plenty of open space in front of the main façades, usually in the form of a "place," with lines of approach formally and imposingly distributed. There was now, as there had been in France for the last three centuries more or less, the happy instinct for wide, formalised spaces, which gave every chance to architecture and the architect. The average French railway station was not very beautiful to his thinking, but it had a style and an air, and it had almost always ample approaches, and a spacious and often quite dignified "place," punctuated and ornamented by statues or fountains. This gave the traveller, upon his entry into and departure from a town by railway, a definite impression of civic order, which could hardly be derived from the squalid yards of nondescript outline that spoiled our entrances and exits by railway in England. One had to recognise, at every turn in France, a much more highly developed national taste, a much higher sense of the importance of architecture than we could claim. We must for the present concede to her pre-eminence in civic architecture, especially in the design of large public buildings and all sorts of public monuments. In domestic, in collegiate, and, he thought broadly speaking in ecclesiastical architecture, we could hold our own with France. In the first of these three—domestic—he thought we could do more than hold our own, at any rate in the domain of the country house, big or little. He was fortunate enough to have several friends amongst French architects, and they all generously and cheerfully conceded the palm to England for domestic buildings. They frequently, indeed, expressed unbounded admiration for the ingenuity of plan, the quiet harmony of exteriors, and the dignified comfort of interiors. "Le *comfort* Anglais" as exemplified by modern English houses won their admiration, and they expressed perpetual surprise at the care and thought

bestowed by our architects upon even minute details. "Vous dessinez jusqu'aux clous des portes," said a French architect to him the other day. We did indeed design the door-nails, and we ought not to have to. In collegiate architecture, to which he had devoted some study in France as in England, he thought we arrived on the whole at happier results than our French brethren. Modern collegiate buildings in France—colléges, lycées, and university buildings—were frequently on a great scale, well thought out for practical requirements in most particulars, but singularly ponderous and gloomy of aspect, chill and stern, impressive indeed, but without anything of the kindliness, the semi-domestic and genial appeal, which marked so many of our collegiate buildings in Britain. In church building, the French architect seemed to him to be generally too much obsessed with monumental effect—with monumental opportunity. His church interiors were apt to be stern in effect, and hard in detail, academic and unsympathetic. They showed as a rule no trace of inspiration from the noble old churches in which his country abounded, no reflection of their impressive but kindly beauty. Broadly, he thought the difference of point of view and achievement between French and British architects was less one of training than of racial characteristics, for the national view of architecture and its necessities had, in each case, begotten the training. The Frenchman, indeed the Latin generally, was town loving and town dwelling, frequently even detesting the country except for his infrequent holidays. The average Briton, in his heart of hearts, loved the country, and cared less or little for the town. He would not accept his town as finally desirable, he named his little suburban habitat with sentimental rurality, he wanted his own little home and garden ; he aspired, if he made "a bit of money," to his ultimate little place in the country. He was thus less critical of the aspects of his town. The town was his workshop, what did it matter what it looked like ? When towns were smaller and the country was always close at hand, he loved towns better and adorned them well in his simple way. He was, however, awaking to civic ideals, to the need of dignity in civic buildings, and of sane and ordered distribution of towns, and he had learnt, and was learning, much from his neighbour across the Channel. Where it was a question of fitting a building to its casual environment, the Briton seemed to him more often sympathetic to surroundings than his French brother, and that probably for the very reason that the latter had a more definite architectural ideal, a more positive professional faith. We had much to learn from France in thoroughness of training, and in the convinced acceptance of a contemporary manner. France, he thought, might aptly take lessons of us in individuality and elasticity of expression, and the sympathetic handling of detail. There was a marked tendency at this moment, begotten of our admiration for things French, to copy as exactly as possible, and without any translation as it were, French architectural fashions, and to dot our streets and squares with Franco-Greek elevations. That was a pity, and an absurdity. If one must be Greek, if one must adopt a windowless, chimney-less, stairless manner of building, evolved from hard materials and a brilliant climate by the alien needs of an alien race, and apply it to the much-windowed, much-chimneyed, infinitely staircased requirements, to the soft dull skies and soft dull materials of Great Britain, was it necessary to seek the transposition at second hand ? "Autre pays, autres mœurs." If we must be Greek, let us be Anglo-Greek on our own lines, and pay to our brilliant neighbour the better and more intelligent compliment of imitating her ideals and her methods, rather than making imitative travesties of her achievements.

Sir RICHARD PAGET, Bart. [*Hon. A.*], suggested that one of the greatest lessons we could learn from French architecture, and especially from Mr. Billerey's admirable exposition, was that definiteness of aim was a quality overwhelmingly valuable in art. He thought that the real strength of the French architect was that he had got a quite definite object at which to aim. He had three objects—symmetry, refinement, and continuity ; the continuity which was learnt by the admirable method of working in studios, so that generations were perpetually overlapping. But he felt that for our purposes nowadays there was need of a fresh aim. There was evidence that the old aims which satisfied former generations were not enough for us. And that came out again in Mr. Billerey's paper. He mentioned how various attempts had been made this way and that, so that people did not know whom or what to follow. There was recently published a remarkable book entitled "The Energetical Imperative," by Professor Ostwald, the eminent chemist. The title did not suggest much in connection with architecture ; but he believed that the book itself had an important bearing on architectural ideals. The author's thesis was that there was only a certain limited amount of energy in our universe to deal with, and that energy was always deteriorating. Therefore the one fundamental aim and object of mankind should be to use the energy which was available to the best possible purpose and with the least possible waste. It had got to go to waste in the end, but we must see that we pass it through proper conduits, so that it should do the maximum amount of work. For example, Professor Ostwald suggested that there was an enormous waste of energy in printing books, there being so many different sizes which were of advantage to no one ; there would be a much greater saving of energy, and a greater possibility of diverting energy into useful and valuable directions, if those sizes

were limited. He also discussed the difficulties of language, the waste of time in connection with scientific work and the work of the world due to its being conducted in so many different languages, which people had first to learn. Professor Ostwald was therefore a disciple of some form of universal language. We could get some advantage by applying that principle to architecture, to see if it would not offer a definite aim such as the aims of olden days, which were absolutely sufficient to the architects and craftsmen of those times. Applying that principle to architecture, it would be seen that there was an immense amount of work done at the present time which would not be justified on any logical principle. Whereas there were a certain number of things done with the idea of what we called efficiency, it might be possible to translate efficiency into a more definite ideal than we do at present, and to feel that it was a crime to do anything which represented either waste of labour in doing work, or making unnecessary labour after it was done. Many of these principles he thought might be applied to architecture with very great advantage. He was very often conscious, in his walks abroad, of the omission of that principle. He had been to garden suburbs where he had knocked his head against oak beams ; he had been into Government offices where it was so dark that the electric light had to be kept going in broad mid-day. He had had many such experiences, and he could not help thinking that this was not good architecture, that it was bad craftsmanship to do a thing which was not really the best for the purpose in hand. Another thing he would like to suggest was that if architects were agreed on any definite method by which a real advance could be made in architecture—and the chances for advance were unspeakably great, with all the novelties of material and novelties of ideal—they could develop real, fundamental changes due to their ways of looking on life, and there would arise a greater architectural revival than any which had been in the past. At present we were fumbling in the dark with the Neo-Greek and Neo-something else and all those different reversions to antiquity which Mr. Billerey so aptly called archæological pedantry. We ought to be thinking for ourselves, evolving really great styles which were needed to lead to great ideals, and so reflect what was growing up amongst us. But supposing that the architects had got those definite ideals, he did not suppose they would be able to put them into practice, because they had to satisfy, not their own inner consciousness, but their clients as well. It was the client who really wanted converting. He suggested, therefore, as a practical addition to the discussion, that supposing architects were agreed as to some of the things which ought to be done, the first thing they ought to do was to try to educate the public. That might be done through the medium of the press, which was always ready for any new idea. If the press were appealed to—assuming that the architects were agreed as to what the appeal should be—there would be little difficulty in getting the general education of the public started, so that the public would know in what frame of mind to consider any new architectural proposition which was put forward. Some present may have seen that picture by Professor Adshead in *The Times* of an arch he (Sir Richard) ventured to suggest at the end of the Mall. Some one had criticised that arch very violently on the ground that it had too many windows in it. Seeing that the arch was intended to be an office building, it seemed to him to be as reasonable to object to it on the ground of having too many windows as it would be to object to the Crystal Palace because it had too much glass in it. The point was not that it had too many windows, but whether, seeing it ought to have an enormous number of windows, those windows were treated in reference to the building, that they gave it that kind of monumental effect which was desired if the building was to serve a double purpose. He did not know whether the public would understand that yet, because they thought that the ornamental and the useful could not be combined. The public had not been to New York, and did not know the possibilities in that direction. It was in that kind of way that a real campaign of instruction would have to be carried on if architecture was to get out of the ruts in which it was so apt to rest. The mere ringing of the changes on the old styles, as if we had no ideas of our own, was not all that was necessary.

MR. R. PHENÉ SPIERS, F.S.A. [*F.*], said that his principal claim to address the meeting was that fifty years ago, in March 1863, he read a Paper on the same subject as Mr. Billerey before the Architectural Association, in the adjoining room. The title of his paper was "The Architecture of Napoleon III." At that time the style known as the *Néo-grec* was predominant, and Mr. Billerey had referred in his Paper to, and shown slides of, some of the chief buildings in that style, such as the Library of Ste. Geneviève by M. Labrouste, the Ecole des Beaux-Arts by M. Duban, and the Prefecture by J. L. Duc. Mr. Billerey had referred at length to the Opera House by Garnier, and as he happened to be in Paris when the competition was held, and had worked on one of the designs and visited the Exhibition, he would have liked to refer to it, but as the hour was so late, he would put in writing what he had to say and send it to the JOURNAL. One new feature which had appeared in Paris during the last thirty-five years, viz. the bow-window, he should like to refer to. He recollected the history of the first bow-window erected. When J. L. Duc came over to London to receive the Gold Medal, he (Mr. Spiers) was invited by the Hon. Secretary, Fred. Cockerell, to meet him at dinner at his house in

Manchester Square. As M. Duc was unable to speak a word of English he (Mr. Spiers) was placed next to him, and he recollected that after dinner M. Duc turned to his host and said, "By the way, there is a little service you may be able to render me; three or four days ago, when in my office at the Prefecture, a card was brought to me of a visitor whom I did not know. He said that he had a great admiration for my work, and that he wanted me to design a villa for him on a piece of ground he had purchased near Paris. I explained to him that my whole time was devoted to the work of the Prefecture, and that I never sought work outside. He, however, pressed me so much on the subject that I at last consented, and, producing a plan of the site, he entered into details as to the accommodation he required. The drawing-room was to overlook the lawn, and he desired to have there a bow-window. I told him I did not know what a bow-window was, and he said it was a favourite feature in England, of which he had seen many charming examples; it is here that I want your assistance. Can you tell me what a bow-window is?" Cockerell laughed and said he would furnish him with tracings of one or two examples, so he was satisfied and relieved of his perplexity. The villa was built, and its window was the first bow-window built in France. Since then the bow-window had been adopted in Paris, but the interpretation was quite different from that which obtained in England. Here the feature was adopted to give more light, and to allow of prospects for the side as well as the front. In France they run up piers carried on corbels to treat the wall surface as a new "motif" and then cut a window between, but the outer reveals of the window are so deep that there is less light than in the ordinary window, and there are no side windows. The French appeared to have been in trouble in naming it, as there were three W's in bow-window, and no W in the French alphabet. They compromised the matter therefore by spelling it Bovindo, which had fewer letters and was more easily recognised. It had been of great interest to him to hear M. Billerey's Paper and to see the magnificent series of slides he had shown, and he supported heartily the vote of thanks.

The PRESIDENT, in putting the vote of thanks, said they had been very fortunate in getting Mr. Billerey to come to them, and they had all been very much impressed by what he had said. Some of the criticism, too, in the discussion had been very valuable. Mr. Warren had pointed out the immense importance attached to scale by French architects, and very rightly so, as one of the most essential qualities of architecture. Mr. Statham had also given them valuable criticism, but he was surprised to hear him say that the fresco by Puvis de Chavannes must be considered the last word in decoration because it was low in its scheme of colour. When one considered Rubens on the one hand, and Tintoretto on the other, to be low in tone hardly seemed to be the last word in colour decoration. With regard to the gloominess of the French lycées—that is, the older buildings, to which both Mr. Statham and Mr. Warren called attention—it must be remembered that they were built for a different purpose. Many of them were old Jesuit colleges, and it was hardly fair to criticise them as modern educational establishments. Mr. Billerey had given them an admirable survey of the French architecture of the last hundred years. His Paper was logically arranged, perfectly clear, and very sound in criticism. He was glad to hear the way in which he handled Viollet-le-Duc. Those who were familiar with French cathedrals would be very glad that he had not spared him. Some of Mr. Billerey's remarks had a particular bearing on the problems which were exercising us at this moment—for instance, the subject of education and the question of ateliers. We ought not, he thought, quite recklessly to apply the system of another country to a different position in our own. Mr. Billerey had remarked that the French school, the great École, taught nothing; it set out to teach nothing. And M. Guadet had said it was one of its qualities that it was not there to teach, but for other admirable purposes. In point of fact, it was a ring in which these gallant young Frenchmen fought it out, with the Professors to hold the bottle and keep the ropes. Mr. Billerey had told them that in the ateliers they did splendid work, but the student had rather to scramble for his knowledge. And on that showing it was difficult to see where the French architects acquired that great technical skill which they undoubtedly possessed. Mr. Billerey had told them that the function of the École des Beaux-Arts was to do away with the difficulties of expression. That was the real achievement of the French training, and that, as Mr. Billerey said, was the real French tradition. But so far as English architecture was concerned, and the training of English students, the solution must clearly be the French solution; it must be solved in terms of French architecture and French language. Therefore it was difficult to apply that to English students. Some quite different solution might be wanted, and that was the point which made English architects pause when they had to consider the training which was best suited for the generation of students who would take their place. He thought, with regard to this difficult and thorny question, that though the ateliers might be useful, the real solution was to be found in a great central School of Design, to which the schools we already had, and those which we might have, would lead; and he should like to see that school developed out of the schools in the Academy, so that all the arts might work side by side. In pursuance of that he would call attention to the brilliant success of the students of the Academy

School of Architecture at the last Prize-giving. There was only one other point to which he would call attention, viz. Mr. Billerey's reading of history, in which he (Mr. Blomfield) did not entirely agree with him. Mr. Billerey remarked that the English had apparently a sort of natural genius for Gothic; but that the French, on the other hand, had a natural genius for monumental architecture. Unless he did Mr. Billerey an injustice, he thought he must have meant by this some version of Neo-Classic architecture. And Mr. Billerey attributed this predominance of the French nation in Neo-Classic architecture to the fact, as he alleged it to be, that the French were a Latin people. In the first place, no one who was familiar with the work done in England at the end of the seventeenth century and in the eighteenth century—Whitehall, Greenwich Hospital, Hampton Court, St. Paul's Cathedral, or the great country houses of the eighteenth century—would admit that we held a place second to any nation. He was sure Mr. Billerey himself would modify his opinion on that point, and would allow, also, that English architects had some aptitude—it may be small, or it may be great—for monumental and Neo-Classic architecture. Then there came the generalisation that the French had shown this great aptitude for monumental architecture because they were a Latin people. He would ask Mr. Billerey how he accounted for the fact that the French people were predominant in Gothic architecture. Where did the Latin come in during that magnificent development of art which lasted in France for some five centuries? To drive it closer, he would come back to the question, "What is the French people?" The French people at the dawn of history were composed of three main races: the Iberians, who survived in the Basques; the Ligurians, who had disappeared into space; and the Celts, who were the predominant race. Then came the Roman domination, and they settled down comfortably. Then there was the succession of barbarians—the Visigoths, Franks, and Burgundians fighting it out together. Where, then, did the Latin come in? The Latin had disappeared at that time, and the Celt was the civilised person, the man of possibilities, held in the background by these hefty barbarians. But it was the Celt who reappeared in Gothic architecture, and Gothic architecture was the inspiration of the Celt. The wheel went round again after four hundred years, and the Latin element, which also had its place in the French race, reappeared, and there was the Renaissance in France. It took the French, even with all their genius, 150 years to get back to anything like an expression of Roman architecture. So he thought that Mr. Billerey's generalisation would have to be modified. He would not go further into this speculation. He was sure they all felt very grateful to Mr. Billerey for his admirable address. It was full not only of interesting history, but also of the most excellent criticism and suggestion.

Mr. BILLEREY, in reply, said that if he had been able to evoke in the minds of his audience an appreciation of French architecture only approaching but a little his own love for the art of Great Britain, he should feel more than recompensed. There could exist in art also a sort of *entente cordiale*, and he should feel quite happy if he could in any way contribute to that. There had been some criticism of French work, and appreciation of it. He did not wish to defend French work, any more than to depreciate other work. French work had been, he thought, a correct expression of the French people, and if there were something which did not fully satisfy the aspirations of English architects, it might be that the demand was not what it would be here. Country churches in France might not be what they were in England, but the religious feeling in France was possibly not as strong as it was here, or was of a different character. It had also been objected that there was too great elaboration of detail in some of the French modern buildings. The Opéra was, perhaps, the start of that kind of elaboration, but it had to be the expression of a society which he might call vulgar—a society which demanded ornateness. Since then that society had disappeared, and French architecture had become wiser and much more refined in expression. He would not defend the arrangement of the decorative paintings on the walls of the Panthéon. They might not be altogether happy, but most of them were very beautiful works of art by such men as Puvis de Chavannes, Bonnat, Benjamin Constant, Jean-Paul Laurens, &c. The question of the teaching in the ateliers had been raised, and he would only repeat that there was no teaching. Official teaching at the school would prevent the natural development of architecture; the school brought together the teachings of all the masters. The master was absolutely free in his studio; he could teach what he liked. The school provided work for the students of any calling who competed for the degrees and diplomas. The school provided certain lectures on special subjects, which were extremely good, but they were not teaching in themselves. The "Philosophie de l'Art" by Taine was a résumé of his lectures at the Beaux-Arts School. The "Théorie et Eléments de l'Architecture," by M. Guadet, was also originally written for his lectures there. The lectures were public, and anybody could attend them. As to the natural tendency of French architects towards monumental architecture, he did not think the cause of that was that the French people were Latin; he thought they were Latin because they lent themselves so readily to monumental architecture and classical grouping. The French had, indeed, been excellent Gothic builders, but they had caught the Renaissance spirit probably more readily than

any other nation, and the method of adding one element to the other without proportionate relation or orderly distribution is no longer French. The Gothic revival did not take at all in France. It had hardly any influence. What France would become in the future he did not know; but, for the time being, France was thoroughly classical. With reference to his own very sincere appreciation of British classical work, he would refer to a paragraph of his Paper concluding his comparison of the two nations.

Decorative Painting.

MR. STATHAM writes:—

The President took exception to my reasons for thinking Puvis de Chavannes the greatest of decorative painters. Let me explain my meaning a little better. My position is this: that when a painting is to be essentially a mural painting, forming part of the architectural decoration, *you must not paint away the wall* by a picture approaching too near to realism. For a picture to keep its place as mural decoration it must give up something of its pictorial character. The French, for the most part, understand and act on that principle. M. Henri Martin, who is still fortunately living, is another master of the art, though in a very different style from Puvis de Chavannes; there is warmer colour than in Chavannes, but it is all kept flat and conventionalised. The French paint decorative landscapes sometimes, but they take care not to make them too like landscape painting; it is landscape composition without landscape reality. Calvé's "Calme du Soir," in the Salon of 1911, was a perfect example of the kind. But no one could class the works of Corot, Harpignies, or Didier-Pouget as decorative landscape; they are something more. For this reason I do not call Rubens a decorative painter in the true sense of the word. He is too strong in colour and too riotous in line. A series of his pictures has been arranged as a decorative scheme in one of the new galleries of the Louvre, but I do not think they were painted with any such intention; they are essentially easel pictures.

The Paris Opera House.

MR. SPIERS writes:—

M. Billerey has referred in detail to the new Opera House by Garnier, and as I happened to be in Paris when the competition took place it has occurred to me that some further account of it might be of interest. The programme was issued in December 1860. Three months were given for the preparation of the designs, which were open to all competitors and not confined to French architects, and five prizes were offered, varying from 6,000 francs (£240) to 1,500 francs (£60).

One hundred and seventy-one designs were sent in, some of a very primitive character, in which attempts were made to describe in writing what their authors were unable to draw. Others enclosed their theatre in great masterpieces, such as the Parthenon, or the Temple of Neptune at Pæstum. They were all publicly exhibited with the exception of the five to which the prizes were awarded. The first prize went to M. Ginain, the architect of the Ecole de Médecine, of which a slide was shown by M. Billerey, and the others to M. Crépinet, Garnaud, J. L. Duc, and Garnier. A new programme was drawn up entering into more detail, as the committee had acquired more knowledge of what was wanted. M. Ginain, placed the first, may have concluded that all he had to do was to follow more closely the new programme. Garnier, the last, recognised that he would have to begin again, and he went off to Bordeaux to study the theatre built there by Victor Louis in 1789. In the second competition the design of Garnier was unanimously pronounced by the jury to be the best, and to him was given the execution. M. Billerey stated that the Emperor and Empress proposed a design without a plan, in which the features of the Garde Meuble by Gabriel were introduced. Unfortunately the Emperor went further. A large model was made of Garnier's design, and the Emperor decided that the front must be raised and made more important. This decision is responsible for the heavy attic story which was introduced and the masking of some of the main features at the back, notably the great *salle* at the back of the *foyer* shown in its semicircular front, and which is now scarcely visible above the attic story. Garnier was of opinion that the character of the building and its distinction ought to be shown in the exterior, and this has always been the principle on which the French architects design their buildings, and to which M. Billerey constantly referred in his paper. The most notable features shown in M. Billerey's slides were the magnificent staircases with balustrades and newels in forged steel, of which we have no examples in English work. I think the French were the first to employ ironwork in their roofs and to decorate them accordingly. M. Billerey showed us slides of the Library of Ste. Geneviève and of the National Library, both by Labrouste, and I remember that in the new front of the Ecole des Beaux-Arts by M. Duc, built in 1861, all the girders in the vestibule are shown with decoration appropriate to the material.

It is probably not generally known that Garnier presented reproductions of the whole of the drawings of the Opera House to the R.I.B.A., and they are to be found in the Library.

M. HULOT'S DRAWINGS AND THE GRAND PRIX DE ROME.

BY the courtesy of M. Bonnat, Director of the Ecole des Beaux-Arts, Paris, the set of drawings which carried off the Grand Prix de Rome in 1901 were lent for exhibition at the galleries of the Institute for about a week from Friday, 14th March. The selection of M. Hulot's drawings was a happy conception, as his work is already known to us through the magnificent series which he made of the Acropolis and Temples of Selinus exhibited four or five years ago in the galleries of the old Water-colour Society. This is also the first time that the actual drawings for the Grand Prix have ever left Paris, and the occasion is very opportune, as it will have enabled students to see the nature and amount of work required in Paris for a similar prize which will shortly be given to English architects in the competition for the new English Travelling Studentship in Rome. The French Travelling Students have, of course, the tradition of nearly two centuries in the production of such work, for the first Grand Prix was given in 1720, and, although there have been seven occasions on which it was not awarded, up to the present day 192 Grand Prix students have been elected.

M. Hulot, whose drawings have been exhibited, was a pupil of Marcel Lambert, Grand Prix of 1873, who for his "*envoi*" of the fourth year of his studentship selected the Acropolis of Athens, and sent measured drawings of all the buildings of the Acropolis, with a conjectural restoration of them. It would be difficult, therefore, to find a better authority on the subject of Greek architecture, and M. Hulot evidently profited much in the excellent training he received. M. Hulot, who was born in Paris in 1871, entered the Ecole des Beaux-Arts in 1888, and passed into the first class in 1891; in the following years he carried off seven important prizes and was five times admitted *en loge*, viz. as a Grand Prix competitor. As in 1900 he carried off the prize founded by the American architects who had studied in Paris, it was a happy coincidence that the subject given in 1901 should be "The American Academy in Paris," of which the programme is appended [p. 348].

In order to compete for the Grand Prix, the student must be of French nationality, under 30 years of age on the 1st January preceding the competition, not married, and must be recommended as capable by his patron or professor. There are two preliminary competitions; from the first are exempt those who have been *logistes*, viz. competitors in previous competitions for the Grand Prix or who have been awarded important medals or prizes in the first class of the Ecole. For the first competition the programmes set are of a simple character, such as the principal entrance doorway to a museum, library, or hippodrome, or the *façade* of a theatre. Twelve hours are given, 9 a.m.–9 p.m., and the design is worked out in the school in separate recesses, called *loges*, about four to five feet wide and the same depth, each recess being lighted by a window and all controlled by an inspector or guardian. The number of students selected in this first competition depends on the number already exempted so that the total number in the second competition shall not exceed sixty.

In the second competition the programme is more extended, and the subject may be the vestibule and staircase of a museum, a maritime prefecture, a palace for the Institute of France, or a design for a national and colonial exhibition by the side of a river or lake: in all cases in the programmes are laid down the requirements, the area to be covered, and the scale for the drawings. Twenty-four hours is given for this competition, viz. 9 a.m. to 9 a.m. on the following day. [To work all night is not unusual in the French ateliers; the students who are behindhand in their work and the comrades who are going to assist them go out before midnight to sup, and then return to work till the small hours of the morning, when other students come in to stretch the drawings on the strainers and paste on the grey borders.] The drawings for this second competition are all made in the *loges* under supervision, and are handed in as soon as they have completed them.

From the sets of designs made in this second competition, not more than ten are selected for the final competition, which takes place in separate studios in the Ecole des Beaux-Arts. Four days and three nights are given to prepare the design for the Grand Prix. In this case the programme is still more extended, and the subject may be a museum of artillery, a palace for exhibitions and fêtes, a Burlington House for the learned Societies, a palace of justice, a palace for the governor of Algeria, a school of medicine, or the vestibules and staircase for a royal palace.

On the afternoon of the fourth day the competitors make tracings of their designs, which they are allowed to take away with them; the drawings are then collected by the secretary or inspector of the school, and tracing paper is pasted all over them and the stamp of the Institute affixed to the tracing. When thus protected they are handed back to the *logistes*, who take them to their respective studios in the school, but are not allowed to take them away; they may be called for at any time, and are eventually exhibited with the finished *projets*. The tracings already made enable the student to set out his design in the atelier where he has been trained, and to obtain the advice of his patron or professor. Students may also call in the assistance of their comrades to black in plans, etc., but none of the studies made out of the school are allowed to be taken into their school studios.

The period allotted for the execution of the completed design (*projet rendu*) is 110 days, nearly four months, or fifteen weeks and five days. [As few of the students would be able to maintain

themselves through so long a period, they return to the offices where they have already been working, and it is in this way that they acquire their acquaintance with actual building construction.] It has already been felt, however, that the *logistes* should receive some kind of indemnity during this competition, and the sum of 200 francs is given to them. The painters and sculptors get 300 francs, as they have to employ models, who alone are admitted into the studios.

Those who saw M. Hulot's drawings in the Institute Galleries will be able to judge of the nature and the amount of work required from the students in the allotted time. They do not go to their studios regularly, however; in fact, I am informed that the drawings by M. Hulot were done in seventy-three days. The *logistes* have first to study their designs at the atelier, frequently done in the evening, and they have also to earn their living in various offices. It is only, therefore, when they have quite decided the principal elements of the plan that they start the finished drawings in the school studio.

All the drawings are required to be inked in or coloured, the walls of the plans being always tinted black; and the correct shading at 45° is always adhered to. It is not the custom to project the shadows of the buildings roofed in, as is occasionally done here in England. If the building is raised on a plinth the shadow of the whole block may be tinted in.

The programme set in 1901 required in addition to the main building a series of isolated blocks for the studios, and the variety of design and composition of M. Hulot's "*envoi*" were of great interest, especially when we remember that in his restoration of the town of Selinus there was a similar variety of design in the houses perched on the slope of the hill of the Acropolis, as if in recollection of his Grand Prix design.

So far we have dwelt only on the competition. It may be interesting now to inquire into the future career of the Grand Prix student when in Rome, his further travels, and the work he is expected to be engaged upon at the Villa Médicis and to transmit to the Ecole des Beaux-Arts.

The award of the Grand Prix is made known about the middle of September, and all the drawings with the original sketch are exhibited afterwards at the Ecole des Beaux-Arts. The prize-holders are required to leave Paris on the 20th December to visit Genoa, Milan, Florence, or other towns, and to reach Rome not later than the 20th January. On their arrival they proceed at once to the Villa Médicis and call on the Director, who is always a painter or a sculptor. They deliver their official papers to him and he gives a lecture on the regulations and rules of the Villa. They then take possession of the rooms allotted to them. The rooms are large and lofty, and constitute their bedroom, sitting-room, and studio. With the exception of the morning coffee, all the students take their meals together at one common table. When the Villa is full there will be four architects, four painters, four sculptors, four engravers, three medallists, and two music composers.

Every travelling student on leaving Paris is given 600 francs for the cost of his journey to Rome, a like sum being given when he returns home to Paris on the termination of his studentship. The annual payment to each student is 2,310 francs, of which 300 is retained in reserve; and in addition the sum of 1,200 francs is put down for the meals. Besides this there are other payments, 50 francs for excavations in the first two years, 600 francs in the third year, and 300 francs for the last year. Architects who go to Athens receive a special indemnity of 800 francs.

When in Rome the students have to return to the Villa by midnight. Students are not allowed to leave Rome without the permission of the Director, and the first year they are only allowed to travel in Central Italy; in the second year they may extend their journey to Italy generally and Sicily, and in the third year Greece is included. When travelling they receive 267.50 francs per month because they have to pay for board and lodging and cost of travelling. The work required from the students and transmitted to Paris at the end of each year is the following:—

In the first year: (A) General Studies, and (B) Special Studies of details of some ancient monument of Rome and Central Italy: four sheets, quarter scale.

In the second year four sheets of details of (A) Ancient Monuments in Italy, one of which must be shaded and the second the same subject restored, and (B) some details of the Renaissance. In the third year (A) two drawings in detail, quarter full-size, of some ancient monument in Italy, Sicily, or Greece, and in addition drawings showing the *état actuel* of the whole or part of the monument; and (B) Decorative details, external or internal, or *ensembles* of the architecture of the Middle Ages and the Renaissance.

In all these cases the drawings remain the property of the student and are returned to him, but he is required to supply tracings of all of them to the Ecole des Beaux-Arts. As a fact they form only a portion of the work done by the students during their stay in the three countries.

In the fourth year the student has to measure some ancient building or assemblage of buildings in Italy, Sicily, or Greece, and to send drawings of the *état actuel*, with conjectural restoration of the same, and various details. This must be accompanied by an historical description of the buildings and a report of the work. These drawings become the property of the State, but they are allowed to publish them, and in doing so are assisted from the funds of the Institute of France.

Many of these publications are in the Library of the R.I.B.A., and among them may be mentioned the Thermæ of Caracalla by Blouet, the Thermæ

of Diocletian by Paulin, the Temples of Olympia by Laloux, Delphi by Tournaire, Pergamon by Pontremoli, Sélinonte by Hulot, Delos by Nénot, Spalato by Hébrard, and Ægina by Garnier.

On their return to Paris, generally at about the age of thirty-four, the Grand Prix students may receive a post as inspector of one of the Government buildings with a small salary, which enables them to start an office and commence work on their own account; but unless they have private means they are sometimes hard put to it. Garnier, I believe, was in very low water when he received a commission from the Prefect of the Seine to paint two water-colour drawings of the Hôtel de Ville for presentation to Queen Victoria when she visited Paris in 1855. These drawings are now in the Library at Windsor Castle. The Grand Prix students are, however, magnificent draughtsmen, and during their travels must have made a large collection of water-colour drawings, so that they may be able to dispose of these. I do not know any instance, however, of their having thrown up professional practice and become artists, as is often the case in England.

R. Phené Spiers, F.S.A. [*F.*]

PROGRAMME OF THE COMPETITION FOR THE GRAND PRIX DE ROME, 1901.

[*Translation.*]

An American Academy in Paris.

The United States is supposed to be organising in Paris a building to receive the most distinguished scholars of the Universities during their sojourn in Paris in order to carry out their scientific, literary, archæological, and artistic studies. They have secured an important site, slightly on the slope, near the Bois de Boulogne, from the expropriated land of the fortifications. It is desired that the building should be an Institute similar to the one we owe to the liberality of President Thiers' sister, to the French Academy in Rome, to the Archæological School in the same city, and to our "Ecole d'Athènes."

The young men staying there would be pursuing studies to their own liking; they are no longer pupils, but young masters who are already trained and able to undertake personal work in the different lines in which they have specialised.

They would live in the most complete freedom, curtailed only by the necessities of decency essential to the dignity of such an establishment, which to some extent includes life in common.

There would be, near the only entrance of a large garden, a building to contain the common rooms—that is, a kind of club, with a large restaurant and table d'hôte, also private dining-room, café, lecture-rooms, meeting-rooms and reception-rooms, exhibition-room for ancient works of art, painting, sculpture, architecture, and engravings, to be used for studying purposes; other rooms for exhibition of new works before their despatch; a small concert-room for musical studies, and lecture-room for literary, historical, or scientific men; collection-rooms to receive specimens or objects useful to the scientific studies of the *pensionnaires*. The whole to be accompanied by vestibules, waiting-rooms, lifts, and all necessary servants' quarters.

A special building—which would include, besides large living-rooms, large reception-rooms for official parties given to guests of the American colony and to Parisian society connected with the institution—would be used as a house for the Director and his family. Servants' quarters, coachhouses and stables, and all that is necessary to a large house would complete the building.

About twenty members would be provided with rooms for their studies, although they would live outside in private "pensions" or hotels.

Buildings for young men whose profession does not require much room, and who would be satisfied with small flats on different floors of two to three rooms each, would be provided; they should have complete arrangements for comfort and convenience, and should be pleasing and well designed. These buildings would contain about forty separate and independent flats.

Twenty detached pavilions of varying sizes would be provided for artists, with studios and special accommodation—a few might be grouped so as to be used by three or four colleagues.

Twenty small houses for scientific men would require laboratories and varied aspects.

Porter's lodge, small stables, coachhouse for general use, spaces for sporting purposes, shelters, music pavilion, and decorative monuments would complete the composition, and woody and garden-like surroundings would frame these small houses. The whole should be treated in a decorative and architectural way.

The site is 200 metres one way, and 400 the other way (the long axis being north-south). Scale 0.002 m. for the plan, one elevation and two explanatory sections; schemes should be presented double scale, 0.004 m.

In the plan walls must be tinted by brush or inked in; elevations washed in or inked in.

Honours and Appointments.

Mr. W. D. Caröe, F.S.A. [*F.*], has been granted His Majesty's Royal licence and authority to accept and wear the insignia of Knight of the First Class of the Order of St. Olaf, a distinction conferred upon him by the King of Norway in recognition of his work in connection with Trondhjem Cathedral.

Mr. Reginald St. A. Roumieu [*A.*], President of the Huguenot Society of London, has been appointed by His Majesty's sanction Knight of Grace of the Order of St. John of Jerusalem in England. This distinction is highly prized amongst philanthropists in connection with ambulance, hospital, and other charitable work. Mr. Roumieu, who has been repeatedly elected a Member of the Council of the Architects' Benevolent Society, is a son of the late Robert Lewis Roumieu, a greatly respected Fellow of the Institute and sometime Member of the Council. His great-grandfather, Abraham Roumieu, was an architect in practice in London in 1769.

Books Received.

Building Construction, in 2 vols. Vol. II. [The Architects' Library.] By John H. Markham [*A.*], Edwin Gunn [*A.*], Alan G. James, Herbert A. Satchell [*F.*], F. M. Simpson [*F.*], J. D. Crace [*Hon. A.*]. With 142 illustrations. 8o. Lond. 1913. 10s. 6*d.* net. [Longmans, Green & Co., 39 Paternoster Row.]

Curtis on the Valuation of Land and Houses. 4th edit., rearranged, revised, and enlarged. By Sydney A. Smith, F.S.I. 8o. Lond. 1912. [*Estates Gazette*, 34 and 35, Kirby Street, Charles Street, Hatton Garden.

Light and Illumination. Their Use and Misuse. A few General Recommendations. Reprinted from "The Illuminating Engineer." Large 8o. Lond. 1913. 3*d.* net. [Vacher & Sons, Ltd., Westminster House, S.W.]

British Fire Prevention Committee—Red Book No. 174.—Fire Tests with Roof Coverings of Asbestos Cement Corrugated Sheets: Report. 8o. Lond. 1913. 2s. 6*d.* [8 Waterloo Place, Pall Mall.]

CATALOGUE OF THE DRAWINGS ATTRIBUTED TO INIGO JONES, PRESERVED AT WORCESTER COLLEGE, OXFORD, AND AT CHATSWORTH.

By J. Alfred Gotch, F.S.A. [*F.*]

IT is evident that these collections are two portions of what was originally one collection, inasmuch as certain drawings in each supplement some of those in the other. Their history appears to be as follows: John Webb, who was a pupil and assistant of Inigo Jones, and who married a kinswoman of his, and was also his executor, bequeathed all his "library and books and all prints and cuts and drawings of architecture" to his son William, with strict injunctions that they should be kept together.* It is said that the widow of William, in spite of these injunctions, disposed of the drawings, which came into the possession of a "Mr. Oliver, the City Surveyor," who, according to John Aubrey (in his *Lives*), "hath all his papers and designs [*i.e.* those of Inigo Jones], not only of St. Paul's Cathedral, &c., and the Banqueting House, but his designs of all Whitehall, suitable to the Banqueting House; a rare thing, which see." It is almost certain that the drawings thus referred to were those which John Webb left by will to his son, and also those which are now at Worcester College and Chatsworth. It is beyond dispute that some years later a large part of the drawings were in the possession of Lord Burlington, and the remainder in that of Dr. Clarke of All Souls' College, Oxford; but how these respective owners acquired them is not known. Lord Burlington's collection descended to the Dukes of Devonshire; the late Duke made over the bulk of it to the Royal Institute of British Architects, but he retained those connected with the Palace at Whitehall. They are now at Chatsworth and are dealt with in the following catalogue [p. 355]. Dr. Clarke, who died in 1736, bequeathed his collection to the Library of Worcester College.† From the outset the drawings were attributed to Inigo Jones: Aubrey refers to them as his; both Campbell and Kent assume the same authorship, and everyone who has subsequently dealt with them has followed the same lead. But it only requires a careful study of those signed by Jones and by Webb respectively to enable the inquirer to distinguish with comparative ease between the draughtsmanship of the two men. The results of a prolonged scrutiny are given in the following catalogue, from which it will be seen that comparatively few can be safely assigned to Jones, by far the greater number being by Webb.

The numbering of the drawings at Worcester College was done for the present purpose; those at Chatsworth were probably numbered from the outset.

The drawings at the Royal Institute formed the subject of a paper in the Journal for the 18th March 1911. The drawings for the Palace at Whitehall are fully described in an article by the present writer published in the *Architectural Review* of June 1912.

* *Inigo Jones: a Life of the Architect*, by Peter Cunningham, 1848. Printed for the Shakespeare Society.

† *Dictionary of National Biography*, under Inigo Jones.

WORCESTER COLLEGE DRAWINGS.

SERIES I. (Miscellaneous).

1. Half plan of the Star Chamber, to a large scale.

Endorsed in Inigo Jones's handwriting "for the Modell of the Starr Chamber, 1617."

2. The other half of the same plan.

On June 22, 1617, Chamberlain writes to Sir Dudley Carleton: "She [the Queen] is building somewhat at Greenwich w^ch^ must be finished this Sommer. Yt is saide to be some curious devise of Inigo Jones, and will cost above 4000li but he hath another modell or platforme for a new starchamber w^ch^ the Kyng wold faine have don yf we could find monie." *State Papers, Dom.* James I., vol. xcii.

There is a council warrant, dated June 27, 1619, for payment to Inigo Jones of £37, for making two several models, the one for the Star Chamber, the other for the Banqueting House. (Quoted in *London Past and Present* by Wheatley and Cunningham, iii. 304.)

The drawings for the Banqueting House are at Chatsworth Nos. **52** and **53.**

The Starre Chamber is a chamber at the one end of Westminster Hall. *Minshen*, ed. 1617. This place is called the Star Chamber, because the roof thereof is decked with the likeness of stars gilt. *Stow*, p. 175. (*London Past and Present.*)

3. Plan of the same building to a smaller scale (11 feet to the inch), showing the compartments of the ceiling.

Title in later hand "Star Chamber."

4. Elevation of the same building, to the same scale.

5. Section of the same building, to the same scale.

The principal room is 76 feet long, 55 feet wide and 55 feet high.

3, 4, and **5** are drawn by John Webb.

6. Elevation of a clock-turret, Whitehall, rising above an embattled parapet. Scale 5 feet to the inch. The plan is on the reverse.

Title in Inigo Jones's writing, "June 1, 1627, for the Clokehouse Whight hale."

7. "The Designe of y^e^ Chirurgians Theater 1636" (in Webb's writing).

Two plans and an Elevation.

The Barber-surgeons' Hall, with which the theatre was in connection, stood in Monkwell

Street, City. Horace Walpole, in mentioning the theatre, says "Surgeons' Hall is one of his [Inigo Jones's] best works. It was pulled down in 1783.

"The theatre is commodiously fitted with four degrees of cedar seats, one above the other, in elliptical form, adorned with the figures of the seven Liberal Sciences, the twelve signs of the Zodiac, and a bust of King Charles I. The roof is an elliptical cupola." *Hatton*, p. 597. (*London Past and Present*, i. 102.)

8. "Celing of the Great Staire Wilton" (Inigo Jones's writing).

Plan and Sections; dimensions figured.

Wilton House in Wiltshire, the seat of the Earls of Pembroke. There is an elevation of one front of Wilton in the Devonshire-Burlington Collection, at the Royal Institute of British Architects.

9. "Ceeling of y^e^ Countes of Penbrooke bedchāber" (Inigo Jones's writing).

Plan and Section; dimensions figured.

The original designs in the panels have been covered with slips pasted over them, on which the finished designs are drawn. The original designs bore some likeness to that of the Cabinet room (No. **10**).

10. "Ceeling of y^e^ Cabbinett roome" (Inigo Jones's writing).

Plan and Section; dimensions figured.

11. "Ffor y^e^ Seeling in y^e^ Cabinett Roome Wilton. 1649" (John Webb's writing).

Plan and Section; dimensions figured.

Alternative sketches for particular features, with letters of reference. Profiles of some of the mouldings to a larger scale.

12. "Ceeling of y^e^ Countes of Carnarvons bedchāber' (Inigo Jones's writing).

Plan and Section; dimensions figured.

The Countess of Carnarvon was Anna Maria, eldest daughter of Philip, Earl of Pembroke.

13. "Ceeling of y^e^ Countes of Carnarvons withdrawing roome" (Inigo Jones's writing).

Plan and section; dimensions figured.

Note in pencil by John Webb "for y^e^ Co. Carnarvons withdrawing roome."

14. "Ceeling of y^e^ passage roome in to y^e^ garden" (Inigo Jones's writing).

Plan and section; dimensions figured.

15. Plan of a ceiling, unnamed.

The dimensions of the room are figured, 35 feet by 22 feet. Probably by Inigo Jones.

Pencil sketches on reverse.

16. Elevation of half a front, Somerset House.

Title, in John Webb's writing, "Upright of y^e^ Pallace at So. House 1638. not taken."

The general treatment of the elevation is somewhat similar to that of some of the Whitehall designs.

17. Plan and elevation of one front of Somerset House.

Titles, in John Webb's writing:

"Groundplatt of y^e^ Pallace at Somerset Hou. y^e^ Second Appartiment: 1638," and

"Upright of y^e^ Pallace at So. Ho. y^e^ second designe 1638."

The façade measures 540 feet in length.

At the foot of the drawing is written in a later hand, "Inigo Jones."

There are more careful drawings of this plan and elevation at Chatsworth, Nos. **54**, **55**.

18. Details of doors and windows, etc., to a larger scale, with reference letters corresponding to letters on No. **17**.

Notes in Webb's writing:

"This is y^e^ just height of y^e^ ½ story as it answers with y^e^ rest of y^e^ front."

"These two windowes are one next y^e^ other in y^e^ designe and are just of y^e^ same distance as they are in y^e^ said designe."

"This is y^e^ just distance as it is in y^e^ designe though there bee a window with pillers in place of this window with Cartooses."

"This is y^e^ just distance as it is in y^e^ designe."

There are drawings connected with Somerset House in the Burlington-Devonshire Collection at the R.I.B.A., viz.:—

A window for the Queen's chapel, dated 1632.

A cistern, dated 1632.

A chimney-piece, dated 1636.

Somerset House (the old building) was begun by the Protector Somerset soon after the death of Henry VIII. (1547). On his attainder and death (January 1552) it became the property of the Crown. James I. granted it to his Queen, Anne of Denmark, and Charles I. to his Queen, Henrietta Maria. Inigo Jones built a chapel 1632–35. The above drawings, dated 1638, were not carried out. Inigo Jones died here in 1652.

In the John Thorpe collection, pp. 87, 88, at the Soane Museum, is a plan of the courtyard adjoining the Strand, and an elevation of the Strand front, both apparently surveys. Among the Smithson drawings (Coke Collection, No. 31) is a plan of the whole palace and gardens, from the Strand to the River. The date of this drawing is probably about 1619. One courtyard is called "the newe aditions at Somersett house." Kyp's view (pub. 1709) agrees with Smithson's plan, save that a part of the garden front had by then been rebuilt. On Smithson's plan the house is called "the queenes house." The dimensions of the court adjoining the Strand do not tally on Thorpe's and Smithson's plans, yet a scale is drawn on each plan, and such dimensions as are figured agree with these scales.

The façades drawn by Webb scale respectively 293 feet for half the front on No. **16**, giving a total length of 586 feet; and a total length of 540 feet for No. **17**. These dimensions are far in excess of the whole width of the garden (adjoining the river) shown on Smithson's plan, which is only 408 feet. It is impossible to say how Webb's building was to have been fitted on to the old building. The garden front in Kyp's view has no relation to Webb's elevations.

19. Durham House: ground plan.

Title, in John Webb's writing, "Groundplatt Durham: Howse 2: designe."

The apartments are named; see list below.

20. Durham House: upper plan.

Title, in John Webb's writing, "Seconde ffloors Durham Howse. not taken 2: Designe." Endorsed in Webb's writing, "Second Designe Durham Howse not taken."

The apartments are named: see list below.

21. Durham House: elevation.

Title, in Webb's writing, "not taken Durham Howse."

This is the elevation belonging to Nos. **19**, **20**, but there are two coupled columns at each end of the façade, which are not shown on the plans. There are flyers over the attic windows.

22. Durham House; another ground plan.

Title, in Webb's writing, "Ground Platt for Durham Howse 1649 (not) taken. [The "not" has been inserted.] The 3rd designe."

Endorsement, in Webb's writing, "Third designe for Durham Howse ~~taken~~ not taken.' There are also dimensions under the heading, "Measures of y^e^ ffront of y^e^ designe of Durham Howse according to y^e^ designe taken."

The apartments are named; see list below. The over-all dimensions of the plan are 332 feet by 173 feet.

23. Durham House: upper plan of No. **22**.

Title, in Webb's writing, "Plant of y^e^ Second Story for Durham Howse (not) taken" [the "not" inserted].

The apartments are named: see list below. For the elevations of this design see No. **51**.

The names of the rooms on the ground plan, No. **19**.

Chaplaines cham.
Study
Secretaryes cham.
Study
Back stairs Lo. side
Private Passage to y^e^ garden form y^e^ Lo. and La. syde
Library
Chapple
Apothecarys Lodg.
Wayters Roome
Stewards Roome
Stewards Cha
Stewards Clearks roome
Study
Private Passage to y^e^ garden from y^e^ gallery above
Antich.
Cham.
Chamber
housek
housekeep. apartm^t^
Housekeeps kitchin
Lobby
Paintry
Weyho.
Workhouse
Bakehouse
Buttry
Passage to y^e^ buttry & bakehouse
Beer Seller
Wyne Seller
Paistry
Boyling place
Great Kitchin
Larder
Privy Kitchin
Larder
backs. La. syd.
Passage to y^e^ back-stairs.

The names of the rooms on the upper floor, No. **20**.

His Lo pps Cabinett
His Lo pps Bedch.
Private dyning roome to serve both his Lo pps and Ladyes appartim^t^
Her Ladiships Cabinett
Her Ladiships Bedch.
Withdrawing roome to her Ladish. bedch.
Pallet roome
Gallery
Backstayre roome
Backstayr
Page's roome
Cabinett
Camera [for Lo. Herbert, *erased*]
Rooms of State (twice)
Camera (twice)
Cabinett (twice)
Backstaire
Antich. Lo. Herberts appartmt
Withdr. chamber
Dressing roome
Bedch.
Houseke s Dyning roome
Lobby
Bedch (thrice)
Antich.
Study (twice)
Lobby
Bakers ch.
Butler chamber
Lobby
Chamb. (twice)
Cabi (twice)
Passage Gallery or Great Chamber
Passage
Chamber (twice)
Cabinett (twice)
Lobby
Paistry man
Cooks roome.

The names of the rooms on the ground plan, No. **22**.

The outward walls in y^e^ lower story are 4 fo: in y^e^ second 3 fo: ½. The division walls below 2 fo: ½ above 2 fo:

Secretary Cham.
Cab.
his study
Survey^rs^ cham.
Study
Library
Chapl: ch.
Study
Chapple
Bottlehouse
Hall
Entrata
Wayters dyning roome
Paintry
Stewards dyning roome
Stewards study
Stewards ch.
Receiver generall ch.
Cab.
his study
Antich.
Receiver of y^e^ west his ch. or rather y^e^ auditors
Study
Under housekeper
Werkhouse
Bakehouse
Passage to bring in Beere & meale
Weyhouse
Beere Seller
Buttry
Ale Seller
Passage from y^e^ offices to y^e^ Hall (twice)
Wyne Seller
Paistry
Larder (twice)
Privy kitchin
Great kitchin
Passage from y^e^ wood-yard
Larder
Woodyard
Lo. backstayre
Stayr for y^e^ serv^ts^ roomes
y^e^ gardiner
La. back stayre
Kitchin garden
Garden towards y^e^ Thames
m^r^ if ye grounde will yield it to gayne y^e^ back of these chimneys beyond y^e^ upright of y^e^ building

The names of the rooms on the upper floor, No. **23**.

Lo. Bedch:
Stooleroome
Cabinett
Wayting roome
Ladyes Backstayre roome
Pallat roome Lo:
Pallat roome La:
Dressing Roome
Privy cham.
Lo: backstayre roome
Lo backstayre
Lo. Wardrobe (twice)
La. backstayre
Womens roome
Ladyes wardrobe
Presence upp to y^e^ Roofe
Great chamber upp to y^e^ Roofe
This stayre rises no higher
Presence upp to y^e^ Roofe
Privy Ch.
La. Ch.
Dressing Roome
La backstayre roome
Stooleroome
Wayting roome
Pall. for La. syde
Pall for Lo. syde
Lo. Bed.
Stoo. Roome
Study
La. backst
Women's roome
La. Wardrobe
Lo. backstayre room
Lo. backstayre
Lo. wardrobe
Wardrobe
Paintry man
Cheife Baker
Butler
Upper house keeper
Entrata
Porters roome
Mr of y^e^ Horse
Paistry man
Cooks roome
Kitchiners

Gallery in y^e^ mediane (?).

This stayre as well up to y^e^ gallery as downe to y^e^ garden.

This stayre & y^t^ on y^e^ other syde wh answers to it rise on higher then this story.

This stayre to lead upp to y^e^ gallery above.

There had been a house, the residence of the Bishops of Durham, on this site since the thirteenth century. After some vicissitudes, the then existing house was given by Cuthbert Tunstal, Bishop of Durham, to Queen Elizabeth, who retained it

during her life, and allowed Sir Walter Raleigh to live there. After her death Raleigh, who had been in occupation about twenty years, was deprived of it, and it was restored to the see of Durham. In the year 1640 Lord Keeper Coventry died in the best portion of the house, and what remained of it was subsequently obtained by Philip, Earl of Pembroke, for whom Webb made these designs, which were never carried out. The remains of the old house were swept away early in the reign of George III., and the brothers Adam built the Adelphi on the site. (See *London Past and Present*, i. 542.)

From the fact that "not" has been inserted before "taken" in the titles of the third design, it would appear that the carrying out of that scheme was, for a time at any rate, seriously contemplated.

24. College of Physicians: Panelling.

Endorsement in Webb's writing "Wainscott & moulds for ye Consultation roome at Phisitions Colledge 1651": "not taken" (added in lighter ink). Title in Webb's writing "Wainscott for y^e^ Consultation roome at Phisitions Colledge." There are no moulds given. The drawing shows three sides of a panelled room. It is signed "Jo. Webb" in two places.

Compare this panelling with that in the Dining room at Thorpe Hall, near Peterborough, also ascribed to Webb.

25. College of Physicians: Library.

Endorsement in Webb's writing, "The Library Phisitions Colledge 1651, not taken."

Title in Webb's writing, "The Plant of the Library Phisitions Colledge 1651."

Plan and elevation of one end. Signed "Jo Webb."

26. College of Physicians, Library.

Elevations of two long sides. Signed "Jo Webb."

These designs must have been made for the building at Amen Corner, which was the headquarters of the Royal College of Physicians from 1560 until the Great Fire of 1666, after which (in 1674) the College was removed to Warwick Lane. (See *London Past and Present*, iii. 82.)

27. Plan and detail plan and an elevation of one side of (apparently) a small theatre. Drawn by Webb.

On a tablet over the door is inscribed "Prodesse et Delectare." There are busts of Thespis and Epicurus, pedestals for Melpomene and Thalia, and niches for Alexander, Sophocles, Aristotle, and one other (undeciphered).

28. Plan and elevation of a Grotto.

Notes in Webb's writing. "Grottas. This Invention may serve for a grotta with some rustick Loggia before it and being vaulted a botle ye solidenesse in ye middle may [sic] is made to sustayne ye said botle & it is adorned with neeches answerable to those in ye sydes of ye wall: within ye Peece may bee voyd & a stayre made to ascend upp into a Tarras over ye grotta."

On the plan is "Serly lib 3 fo. 69: a." Webb's plan is a revised version of that in Serlio's *Architettura et Perspettiva*, Venice, 1619.

Note against the elevation "Many tymes there may bee a place for a building without any opening as in a Court or in a garden or y^e^ like with [sic] for adorning whereof such an Invention as this may bee made use off in wch may bee placed statues & other antiquityes as ye occasion serves. Serly lib: 4: fo: 137."

The elevation is adapted from the illustration referred to in Serlio.

29. Rough sketch of a Fountain, in pencil.

Title in Inigo Jones's writing "ffontane di Giovanni maggi (?) Romano Roma 1618."

A more careful ink rendering of the same.

30. Another rendering of the same idea as No. **29.**

31. "For a ffountaine in a wall at Greenwich 1637." Webb's writing; scale drawn.

32. Perspective sketch for a fountain of two stories. Probably by Webb.

33. Plan, section, and elevation of a large Mausoleum (?)

The figured dimensions "100 fo." etc. are apparently in Webb's writing.

34. Plan and section of an oblong room (46 feet 3 inches by 27 feet 9 inches), with an outside portico of six columns, 22 feet distant.

35. Plan and alternative section of the same room.

The corners of the room differ from those on No. **34.**

36. Plan and section of a somewhat similar room, but 43 feet 6 inches square. It has an outside portico with columns, 22 feet away.

37. Plan and section of a long room (111 feet by 64 feet 9 inches), with detached columns round it.

This evidently inspired the design for the Assembly Rooms at York, attributed to Lord Burlington.

38. Plan, elevation, and section of a cruciform church with equal arms and with a dome over the crossing.

The finial on the dome resembles those on the towers of Whitehall Palace, series iii.

39. Plan of a large circular church with four square projections on the axial lines.

On the reverse are numerous "measures without" and "measures within," in Webb's writing. Internal diameter of church 316 feet. Width, out to out, 530 feet.

40. Elevation of No. **39.**

41. Section of same.

42. Plan, two elevations and two sections of a church with a portico of columns.

The drawing is marked in pencil in a modern hand "Inigo Jones," but the draughtsmanship is Webb's.

43. Plan of a large cruciform church with circular east end.

Half the plan shows a building of single span without aisles: the other half shows a similar building but with aisles outside it. The length of the larger design is 610 feet within. The width of the Nave is figured "55 ft. and $\frac{1}{2}$ of an inch." The aisles are half this width, viz., 27 feet 6$\frac{1}{4}$ inches, as also are the walls between the main building and the various aisles.

44. Sections and elevations of No. **43.**

One section (on left of the paper) is half the section through the dome and one transept, and half the west elevation. Another is the section through the chancel and its aisles, looking east. The third is half the section through the transept, and half an end elevation of the transept.

45. Part elevation and part section of a domed church, apparently an alternative of No. **44.**

Another section of a church, in pencil.

46. Part plan, elevation, and section of a domed church.
Nos. **38–46** appear to be of Webb's drawing.
Are **43–46** sketches for rebuilding St. Paul's Cathedral ?

47. Unfinished plan of a church, with unfinished part elevation on the reverse.
Dimensions etc. are in Webb's writing.

48. Section through the court of a large house, showing the façade of the court.
There are voluminous notes as to dimensions and proportions in Webb's writing on the reverse.

49. Another section through the court of a large house.

50. Central portion of No. **49** to a larger scale.
49 and **50** are of Webb's drawing.

51. External elevation, and section through the court of a large house.
This is Durham House : see the plans Nos. **22, 23.**

52. Plan, elevation, and section (to a small scale) of a large house with an arcaded central court.

53. Plan and elevation of a small house, with loggia on upper floor : resembles some of the designs in Kent's *Designs of Inigo Jones.*
Two sketch plans in pencil.
The writing is Webb's.

54. Elevation of a house, with central block, outlying wings and connecting arcades.

55. Elevation of small house ; frontage 55 feet.
Title in Inigo Jones's writing "Upright for my lo Matravers his house at Coatsbury 1638."

56. Ground and upper plans of a small house, after the style of Kent's *Designs of Inigo Jones.*
The rooms are named in Webb's writing : on the ground floor—Hall, Kitchin, pastry, larder, pantry, wynter Parlor, summer Parlor, chamb. On the upper floor—Dyning Roome, withdrawing roome, Padrons chamb. study, chamb. (thrice).
There is an elevation in the Burlington-Devonshire Collection at the R.I.B.A. which almost agrees with these plans.

57. Elevation of a small house, with columned portico ; frontage 54 feet.
May be by Inigo Jones.

58. Plan and elevation of a one-story house, with a heavy attic without windows.
There is a staircase, however.

59. Part plan and elevations of a large building with a courtyard, and a two-story open arcade on the outside.
Resembles the Libreria Vecchia at Venice.

60. Alternative elevation for No. **59.**

61. Elevation of a large house.
Closely resembles pl. 49, 50, vol. ii. in Kent's *Designs of Inigo Jones.*
Probably by Webb.

62. Small studies for houses (some plans, more elevations).
One is noted "Serlio lib. 4: fo: 166:" but the reference does not apply. Another is "office of y^e^ worke at Newmarkett."
The writing is Webb's.

63. Small studies for plans of houses ; also two on reverse.
Compare similar sheet of studies in the R.I.B.A. collection. Webb.

64. Small studies for houses ; sections and elevations.
One elevation may be for one of the plans on No. **63.**
Another (with two towers) resembles the central portion of an elevation of Whitehall Palace at Chatsworth (**63**). Webb.

65. Small studies for plans of two large houses, with outer courtyards.
Also plan of a small vestibule. Webb.

66. Studies for doorways.
Three are named Dorick, Ionick, Corinthian.
Two others are to a larger scale in the R.I.B.A. Collection.
Another is the drawing to scale of a doorway and wall of which a figured sketch is in Folio 13 (No. 3) of Palladio's *Original Designs* in the R.I.B.A. Collection.

67. Studies for arcades.

68. Studies for archways.
One is entitled, in Webb's writing, "Arch in Verona. This is measured by y^r^ ancient foote." Also detail of a cornice and pedestal.

69. Two Classic archways.
Notes and dimensions in Webb's writing.
Are these adaptations from Serlio ?

70. Three slight studies ; one of an arcade, two of door ways.
Webb's dimensions.

71. Studies of windows, a door, and part of a one-story façade.
Against one window is a reference to "Serly lib 3 fo: 89: b: & 90: a," but it does not apply to the 1619 edition. Webb's writing.

72 and reverse. Sheet of studies, entitled in Webb's writing "private Chappells for galleries or otherwise."
Mostly from Serlio : the references apply more or less to the 1619 edition, but some of the plans may be studies founded on Serlio. The reference, on the reverse, to Li 4 fo: 147 should be 149.
On one of the plans is the note "Serlio Lib: 3: fo: 65 b. This church hath foure entrances & y^e^ Communion Table stands in y^e^ middle, at y^e^ foure corners there may bee vestryes & over them y^e^ belfryes especially in front & over y^e^ loggias may bee galleryes."

73 and reverse. Sheet of studies, entitled "Wyndowes &c."
There are notes in Webb's writing on both sides of the paper. The references are mostly to Serlio : there is one to "Pall fo: 82:" There are two references to "Newmarkett," one to "Sr P. Kelligrew's howse Blackfryers" and one to "St. James's." In the references to Serlio the folio is sometimes misquoted.
Notes in Webb's writing :
Vide dores—for a front where wyndowes are made with pillars or pilast—it must bee observed y^t^ the bases and Capitalls of them must bee of another Invention & of lesse ornam^t^ then y^e^ bases & Capitalls of y^r^ principall Columnes of y^e^ front yett neverthelesse y^r^ same order must bee always observed Ser lib 3 fo: 112.
The middle space of this wyndow is twice as much as y^e^ syde spaces : y^e^ Col a is but ½ a diameter : therefore these manner of wyndowes should have y^e^ syde spaces not lesse then ½ y^e^ middle space nor more thent. And these manner of wyndowes may bee used where y^e^ buildings

stand in narrow & straight places so y^t y^e roomes may have y^r greater light.

73 reverse.

Wyndowes of y^r stayrcase at S^r P. Kelligrews house.

Blackfryers Mr Jones' (?) designe.

Wyndowes of y^r first story above.

How y^r moulding wch continues under y^r eaves of y^r Roofe advances y^r head of y^r wyndowe. A. moulding under y^r Roof. Newmarket Brewhouse.

At Newmarket the principall Cornice of y^r front is on y^r syde backwards converted into 2 fascias & these fascias break as in this schitzo to give way to y^r lights of y^r halfe story.

74. Four small studies of "wyndowes."

References, "P: P: R fig: 6. P: P: R fig: 11."

75. Studies for "Exchanges or Merchants Piazzas."

Voluminous notes in Webb's writing (see below).

The plan at the top of the paper is adapted (without reference) from Serlio Lib. 3, fo. 75.

Notes in Webb's writing :—

This designe may bee used when there is a free situation so y^t y^r Porches may bee made round about.

This designe may serve for a Royall Exchange from a metropolis as London & y^r like where y^r Piazza A shall serve for y^r Merchants & y^r wall of wh Piazza in y^r lower order may be adorned with neeches for statues : y^r Porticos on y^r outsyde may form with foure streetes & round about them may bee shopps for tradesmen. At each corner there is an ovall stayre for y^t agrees best with y^r Invention wch band in to y^r second wch likewise hath open porticos round about & shopps on each syde both towards y^r Piazza & streetes so y^t in both storyes there wilbe 176 shopps or thereabouts the rent wherof wilbe sufficient to defray the charge of such a worke.

The stayres may end above y^r worke with some noble turrett with a cupola over it.

A Merchant's Piazza. B first story. C second story. D places to pisse in for in places of concourse such commodityes are necessary. [Then follow dimensions.]

If ye portico bee made but uppon two sydes because y^r ends of y^r Exchange joyne to other buildings then instead of y^r portico at each end there may bee several shopps in add as in this schitzo.

If ye shopps bee made double then at every 3 shopps there would bee an entrance out of ye Portico y^t y^e shopps of y^r middle may have sufficient light.

If ye worke fronts but uppon one Streete then y^r Invention may bee according to this designe but there must bee wyndowes made in y^r half circle of y^e shopps behind to give light to y^r under passage.

76. Three sections of buildings.

Probably through the saloon of a house.

77. The front of a one-story columned building.

Probably a church.

78. Two sections, showing features of a garden.

79. A large plan only partly inked in.

80. A number of drawings of the Orders etc., with letter press.

81. A number of drawings of Grecian and other houses, doorways etc.

Nos. **80, 81** were apparently intended for publication.

WORCESTER COLLEGE DRAWINGS.

SERIES II. (loose flat drawings in tray).

WHITEHALL PALACE DRAWINGS.

1. Ground plan.

Scale, 60ft. to the inch.

2. Upper plan.

To same scale.

3. Second floor plan.

To same scale.

The overall dimensions are 1160 feet by 860 feet.

The square court was to be on the east, or river front; the circular court on the west, or park front. The Banqueting House is towards the south end of the east side of the large court.

There are plans of the ground and upper floors of this design at Chatsworth Nos. **86, 87.** They are drawn to a larger scale (30 feet to the inch) and show a larger building, 1280 feet by 956 feet. They have precisely the same disposition as these at Worcester College, except in respect of the circular lobbies on either side of the square court.

Kent reproduced the Worcester College plans in his *Designs of Inigo Jones*, vol. i., but he followed the Chatsworth plans in the particular in which the two sets differ. He also reversed the plans in the process of engraving them, so that south became north and *vice versa*.

4. Elevations of the east and west fronts.

The upper drawing is the west elevation; the lower the east.

There is a small preliminary sketch (by Webb) of half of one of these elevations at Chatsworth (No. **80,** reverse).

There is a detail of the ground story of one of the corner pavilions at Chatsworth, No. **82.**

The elevation of the south (or north) front is in Series iii. 1.

5. Section through western courts, looking east.

Section through eastern courts, looking west.

These Sections show the Banqueting House and its corresponding blocks.

6. Section through the large court, looking either east or west.

The main longitudinal section is in Series iii. 1.

Kent published the scheme represented by the drawings 1–6 in his *Designs of Inigo Jones*, vol. i.

7. Two elevations for other schemes for the Palace.

The upper elevation agrees with the plan of a scheme at Chatsworth, No. **73.**

There is a note in Webb's writing, "To cast these spaces ÷ into arches and make a portico below towards y^e garden." This alteration was developed on a drawing at Chatsworth, No. **80.**

The lower elevation agrees with the plan for another scheme at Chatsworth, Nos. **68, 69.**

There is a note in Webb's writing "To make this front of three continued storyes."

8. Modern copy of ground plan.

9. Modern copy of upper plan.

10. Mounted tracing of ground plan.

11. Mounted tracing of upper plan.

12. Ground plan of another design, signed "John Webb Archit."

The over-all dimensions are 1100 feet by 800 feet. The latter dimension is written in pencil against the Banqueting House (east) front.

There is an elevation of one of the shorter fronts (the east) at Chatsworth, No. **66.**

There is also a plan similar to this at Chatsworth, No. **85.** It retains the same general disposition, but is varied in detail, and is somewhat larger.

WORCESTER COLLEGE DRAWINGS.

SERIES III. (on rollers).

WHITEHALL PALACE DRAWINGS (except three at end).

1. Elevation of one of the long fronts (south or north).

There are arcades shown on the ground story at each end of the front; on the ground plan there is an arcade only at one end.

Longitudinal section, showing the internal courts.

The turrets at the ends of the fronts have been added on small applied pieces of paper.

These drawings are part of Series ii. **1–6** and are drawn to the same scale as ii. **4–6.**

2. Section (to a larger scale) through the central court.

Similar to ii. **6,** but more neatly drawn and more developed.

3. Section, same as iii. **2,** but showing variations in the design.

There is a detail of part of the central block at Chatsworth, No. **83.**

4. Elevation of one of the short fronts of another design.

This is practically the same as the upper elevation on ii. **4.**

5. Elevation of the other short front of the same design as No. iii. **4.**

6. Elevation of one of the long sides (the south) of the same design.

7. Longitudinal section (looking north) of the same design.

8. Transverse section through the eastern courts (looking east) of the same design.

These sections, which show the courts, imply a plan differing largely from those in series ii. **1, 2, 3.**

9. Elevation of same front as No. iii. **4,** but varied in design.

10. Elevation, a variant of the last.

11. Elevation, another variant.

12. Elevation, a variant of No. iii. **6.**

Nos. **10, 11, 12** are cut out and mounted on vellum.

13. Longitudinal section, a variant of No. iii. **8.**

14. Elevation, a variant of Nos. **4** and **9** of this series. It appears to be by a more modern hand.

15. Two drawings on one roller.

One is endorsed in Webb's writing "The great Court opposite to y^e^ Banquetting House," but it does not connect itself with any of the drawings either at Worcester College or Chatsworth.

The half façade scales 333 feet.

The other is entitled "Purfyle of y^e^ Duke's Pallace at Cobham, 1648."

This design was not carried out. The later side of the court at Cobham Hall does not resemble this drawing.

16. Elevation of part of the back of the Pitti Palace, Florence.

"Scala di Braccia Fiorentine."

17. Elevation of the Pitti Palace at Florence.

"Scala di Braccia Fiorentine."

THE CHATSWORTH DRAWINGS FOR WHITEHALL PALACE.

The drawings are bound in a volume entitled

ORIGINAL DESIGNS FOR WHITEHALL BY INIGO JONES.

The drawings are numbered, beginning at **48.**

48. Block plan and part elevation of a scheme for Whitehall Palace.

The plan is sketched by hand, and shows a disposition different from any of the other designs. It lies practically north and south, the north being at the top of the paper. The north front faces a large open space, or square, which extends as far as a cross thoroughfare, named as to the east part "The Strande," and as to the west, "way to St James's." North of the thoroughfare is the "Mews," occupying what is now Trafalgar Square. To the east of the palace are the "Gardens," to the south, the "Privy Garden," to the west the "Parke." The Banqueting House is in the centre of the east side of the south-east court.

There are various dimensions set out, which give the over-all size as 832 feet by 634 feet 6 inches.

The drawing is dated "Oct. 17, 1661." The figures and writing are Webb's. He must therefore have been working on this design after the Restoration of Charles II.

49. A ground plan of another design for the palace.

This comprises three courts; the two smaller are to the west (conf. block plan No. **56**). The Banqueting House is on the east side of the south small court, the corresponding block in the north court being the chapel.

Notes in Webb's writing:

"Under the Kings Guardchamber to make his Mat's privy Kitchin. So under the Queens."

"In the half story over the Guardchamb. & presence an Appartm^t^ for y^e^ Kings Lo. Chamb. so over these roomes on y^e^ Q's side."

"To make a corridore about the hall."

"Over this roome an Armary."

"Over this Gallery a Library."

The east front was originally intended to be a series of rooms, but they have been erased, only the names remaining.

The over-all dimensions appear to be 696 feet by 564 feet.

For other drawings connected with this scheme see Nos. **56** (block plan), **57** (copy of ground plan), **58** to **65** (alternative elevations).

50. Two plans of the Banqueting House (scale 11 feet to the inch).

Titles in Webb's writing:

To lower plan, "Ground platt of y^e^ Banquetting Howse first floore."

To upper plan, "Second ffloor with y^e^ manner of y^e^ Seeling of y^e^ Banquetting House."

51. Four drawings of the timber construction of the roof of the Banqueting House.

Titles in Webb's writing:

"The Trusse of y^e^ hipp at y^e^ Banquetting howse."

"Trusse of y^e^ Roofe at y^e^ Banquetting."

"The backside of y^e^ puncheon."

"Syde of y^e^ Roofe Banquetting howse."

"Groundworke of y^e^ Roofe at y^e^ Banquetting howse."

52. Plan and elevation of the Banqueting House.

Apparently a preliminary sketch by Inigo Jones.

There is a low annex at each end. Compare No. **53.**

53. Elevation of the Banqueting House, by Inigo Jones.

In the main this tallies with the building as executed: the central pediment was omitted, and a balustrade was adopted after the manner indicated in pencil. The swags under the top cornice are added in red chalk. They were adopted in execution. The pilasters at the corners of the front are actually two separate pilasters, not coupled as here shown.

54. Plan of a proposed addition to Somerset House.

55. Elevation of No. 54.

Nos. **54, 55** are more careful versions of the design shown on the drawing at Worcester College, Oxford, i. **17.**

56. Block plan of No. **49,** showing outline of the existing buildings.

Compare with John Fisher's plan of Whitehall Palace, 1680, published by G. Vertue.

57. Ground plan, a careful copy of No. **49.**

58–65. A series of alternative elevations of the west façade of the large court, No. **49.**

These elevations vary in length and in detail, but the general disposition is the same throughout. No. **65** agrees more closely than the others with the plan, but the drawing combines the façade of the court with the corner pavilions of the east front.

66. Elevation of east front of the plan at Worcester College, ii. 12, signed "John Webb Archit."

Notes in Webb's writing:

"M^r^ I designd these uprights for the King at ¾ of an inch to tenn feete."

"Upright of the Pallace of Whitehall for King Charles y^e^ first taken but y^e^ ffront is to be encreased according to y^e^ groundplatt John Webb."

This "encrease" refers, no doubt, to the plan No. **85** (*post*).

This elevation resembles the series **58–65.**

67. Part section and part façade of another design.

The beginning of the Banqueting House is shown on the extreme right. The section is taken through the Presence Chamber, as throne and canopy are indicated.

The style of the architecture differs from that of any of the other drawings, and this drawing agrees with none of the plans. It may be by Inigo Jones (but ?)

68. Rough ground plan of another design, partly inked in.

The notes and dimensions are in Webb's writing.

The plan is symmetrical and consists of a square central court with three courts above and below and two to the right and left. The principal staircase is in the middle of the lower side of the central court. To the right of the main plan is the setting out, to a larger scale, of the left half of the façade at the top of the plan. This part plan is carefully figured and on it is the following note. "This court is 232 fo: 2^i^¼ wch comprehends y^e^ 15 spaces & 3 fo: 1^i^⅛ advance at one end y^e^ body is 202 fo. 2^i^¼ wch comprehends 13 spaces & 3 fo: 1^i^⅛ advance on each syde" [y=ynch].

The over-all dimensions work out at 926 feet 6 inches by 863 feet 6 inches.

There is no room which can be identified as the Banqueting House.

68 reverse. Part section of a two-story building, with the commencement of another adjoining, arranged with seats in tiers.

On the latter is the note "upright for H of C."

69. Elevations, with explanatory plans, of the central block and a corner pavilion of plan No. **68.**

(Compare the plans with the enlarged part plan on **68.**)

The draughtsmanship is Webb's, as are also the notes and figures.

The whole elevation of the façade, embodying these portions, is given on the Worcester College drawing ii. **7** (lower elevation).

There are also sketch-details of the cornices and keystones, with reference letters to indicate their positions.

The note under the corner pavilion "65 fo: 2^ins^ so y^e^ outsyde of y^e^ thicknesse of y^e^ walls at y^e^ Angles falls out perpendicular to y^e^ diameter of y^e^ pillers."

70. Studies for the "Principall Stayres, taken" on plan **68.**

Drawing and writing by Webb.

Also part of an arcade, with a mutilated note in Webb's writing.

71. Preliminary sketch plan and elevations, to a small scale, for the same design as No. **68.**

A "councell chamber" is shown, but no Banqueting House.

Drawing and writing are Webb's.

The elevations have reference letters answering to others on the plan.

71 reverse. Part plan (apparently of another scheme) mutilated for use on other side of paper.

72. Plan, section and (?) elevation of "y^e^ Chappell."

Drawing and writing by Webb.

This appears to apply to plan No. **49.**

There is a reference to "Pall lib 1 fo 15."

73. Ground plan of another design partly inked in.

This appears to be a development of the plan No. **68.** It shows a circular court. There is no room which can be identified as the Banqueting House.

There is a note in Webb's writing against the right hand front. "Entrata peece for y^e^ use of y^e^ officers."

The over-all dimensions work out as 1,050 feet by 928 feet, the shorter side being of practically the same length as the longer side of No. **68.**

The upper elevation on the drawing at Worcester College ii. **7** agrees with the shorter side of this plan.

74. Two plans of portions of No. **73,** to a larger scale.

The plans (which are not in right relationship) are of the large central court, with variations, and of the middle court on upper part of the plan (opposite to the round court).

75. Plan and section of the chapel or hall on No. **73,** in the middle of the upper side of the central court. Webb's drawing and figures.

76. Plan and sections of the vestibule to the round court; at bottom of plan No. **73.**
Also sketches for arcades with caryatids: one is named "the lower order of y^e^ round Court."
There are dimensions giving the "length & bredth of y^e^ court Cariatide."
Sketch for a cornice.
The drawing, writing and figures are Webb's.

76. reverse. Two alternative plans for a round court.
Dimensions and writing by Webb.

77. Plan and sections of the hall between the round and central courts on No. **73.**
Sections of the vestibule on No. **76.**
Sketch plan of the chapel. All by Webb.

77. reverse. Plan and elevation of a house.
Similar to the series in Kent's *Designs of Inigo Jones*, vol. ii.
Dimensions in Webb's writing.

78. Plans and elevation of the loggias on either side of the round court on No. **73.**
Alternative elevation.
Notes in Webb's writing: "loggia di sopra appresso corte rotunda"; "questa loggia è in Solaro"; "Front of y^e^ quadrangular Court; This Invention to serve for y^e^ lower story all with round frontispeeces"; "Loggia below next to y^e^ round Court."

79. Two elevations. The lower apparently of a corner pavilion on No. **73.** The upper for the loggia towards the right hand end of the front at the top of plan No. **73.** By Webb.

79. reverse. Partly finished elevation, similar to the lower elevation on No. **80.**

80. Plan and elevation of the central portion of front at top of No. **73.** Plan on No. **74** is an intermediate link.
Elevation, carrying out the note on the upper elevation, Worcester College, ii. **7.** Adjoining this is a note in Webb's writing "taken for y^e^ front to y^e^ garden. y^e^ pillars & ornaments being proportioned as in y^e^ other paper. this alteration is made because y^e^ space for y^e^ neeches in y^e^ designe seemes to wyde and y^e^ spaces for y^e^ wyndowes & middle Intend too narrow."

80. reverse. Plan of a triangular house, with circular court: sketch elevations of particular features.
Small sketch elevation of half the west front of Whitehall Palace, elaborated on the drawing at Worc. Coll. ii. **4.**
Notes and dimensions in Webb's writing.

81. Sketches for various friezes.
The allocation of each is indicated: as there are references to "y^e^ round court," they were probably connected with the plan No. **73.**
The drawing and writing are Webb's.

82. Detail of doorway and window.
Apparently the detail of part of corner pavilion on Worc. Coll. ii. **4.**
Webb's writing on back.

83. Detail of doorway and windows.
This is part of the central block on the section Worc. Coll. iii. **3.**
There are notes on the reverse in Webb's writing, with the title "Faciata in greate, front of y^e^ insyde of y^e^ first court."

84. Two sketch elevations for parts of the courts on No. **73.**
The upper sketch is entitled in Webb's writing "for y^e^ K & Q Courts."
The lower is part of a rectangular court. Compare No. **7**, where caryatids are shown; the dimension of the arches from centre to centre is 19 feet 9 inches in each case.
Drawings and writing by Webb.

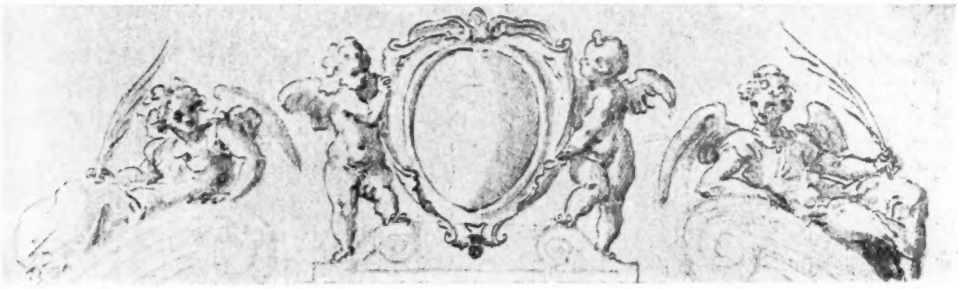
85. Plan of the Palace.
This is the alternative plan referred to on the elevation No. **66.** It is of the same general disposition as the plan Worc. Coll. ii. **12**, but somewhat larger, and the detail is different.
There is a title in Webb's writing "Ground Plant of the Pallace of Whitehall for King Charles y^e^ first, taken, John Webb Archit."
The Banqueting House is on the left part of the bottom front, and is figured 110 feet by 55 feet.
The over-all dimensions are, by scale, 1,110 feet by 900 feet.

86. Ground plan of the Palace.

87. Upper plan of the same.
These two plans agree with those at Worcester College, ii. **1, 2**, except in regard to the central lobby on each side of the square court. They are drawn to a larger scale, and the over-all dimensions are larger, being figured on No. **87** as 1,280 feet by 956 feet.

88 (not numbered). Plan of a long narrow house.

89. Elevation of the last.
There are also four plans and elevations of the Louvre, entitled "Plan du Chasteau du Louvre Du Dessing du Cavalier Bernini."



REVIEWS.

JACOBEAN ARCHITECTURE AND INIGO JONES.

Jacobean Architecture and the Work of Inigo Jones in the Earlier Style. Illustrated with 14 *plates and* 4 *appendices. By Arthur T. Bolton* [F.]. *Price* 1*s. net. [Published at* 28 *Victoria Street, S.W.*]

A careful perusal and re-perusal leave us in considerable doubt as to the real intention of the author of this essay. Not an analytical study of Jacobean architecture apparently, since he offers no explanation of its genesis, its phases, or distinctive features. Not analysis or exemplification of the known work of Inigo Jones, from which comparisons might be drawn with the many things uncertainly attributed to that Master, since no such attempt is made. Still less any definite application of his most interesting, careful, and useful chronological Appendix to the foregoing essay, which is full of value. He arrives at, and states, it is true, certain conclusions, and ends with "The conclusion of the whole matter is that we inherit from this half-century some antique and lovely English homes, and derive therefrom a pleasure that is certainly no mere outcome of sentimental associations. Places like Fountains Hall, Abbots' Hospital, Kirby Quadrangle, St. John's, Warwick, Moyn's Park, and the Garden Front of St. John's, Oxford, produce an impression that no prejudgment can efface."

As a statement of a happy fact, no one is likely to quarrel with this, except mildly perhaps with the apparent irony of the qualification as "homes" of one or two names in the list. But if this absolutely innocuous, and, as far as we are concerned, indisputable view is really the conclusion of the whole matter, what a deuce of a journey we have had to arrive at it. And have all the knowledge, enthusiasm, and research of the author been employed to bring us only there? He does not do himself full justice, and that is a pity. With his obvious ability, his fine materials, and carefully selected and ample array of tools, plus a little more arrangement and logical consequence, a really valuable contribution to a subject of very high interest, and of serious importance to students, might have taken the place of the interesting and readable but somewhat confused and confusing treatise before us.

In relation to Inigo Jones, Mr. Bolton's chief pre-occupation appears to be the confirmation of some of the many prevalent and rather vague attributions of authorship to that great artist, and the discovery of more or less plausible new ones. In this task he exhibits considerable skill, industry, and patient ingenuity, but he is, to our thinking, too easily convinced to be convincing.

With regard to the well known and beautiful Garden Front of St. John's College, Oxford, and the contingent quadrangle to the westward of this, which he illustrates by photographs and measured drawings, and to which a loose attribution to Inigo Jones has long attached, in spite of the obvious lack of resemblance in manner to any of his known work, he "finds no real grounds to doubt Inigo Jones's authorship."

After a little excursus into Dr. Heylyn's "Cyprianus Anglicus," whence he produces no real evidence whatsoever, and a confirmatory side glance at the certainly interesting suggestion, but by no means positive evidence, afforded by the sculptor Le Sueur's employment upon royal statues for Winchester, where Jones was employed, as well as at St. John's, Oxford, he accepts the case as proven, and says "eleven years later (than the Whitehall designs) he gives us this lovely creation, &c.," and almost immediately goes on to say, "There seems no reason to refuse the authorship of the Porch of St. Mary the Virgin to him as well." There is at least the reason of entire lack of evidence and lack of resemblance to Jones's known work. And we should consider such an attribution to be most unjust to his reputation. If that master's authorship could be proved in the case of even the Italianate portions of the Second Quadrangle at St. John's, whose details suggest alliance to the more refined types of Flemish contemporary, or immediately precedent, work—a proof that would be of enormous interest, but is yet to make—it would be difficult to accredit the same author with work so different in type and feeling, so much clumsier in design and coarser in detail, and erected several years later. A likelier attribution for the porch, we should say, would be to Nicholas Stone.

Mr. Bolton puts a high estimate upon the architectural value of this work. "Purists may say what they like," he writes, "the fact stares us in the face that this little work is a gem of its kind. One of those things that only a master can achieve with success." This is mere assertion without any shadow of proof. In the "forties," "fifties," and "sixties" of the Gothic revival the "fact" stared architectural enthusiasts in the face that this, as we think, delightfully picturesque and effective little porch was a piece of dreadful barbarism, fit to be replaced by something in truer taste, like the equally barbaric, and almost equally delightful "Roman," gateway at Magdalen, also unauthentically attributed to Inigo Jones, replaced by Pugin's gate, and itself destined to be removed in the early "eighties," in spite of Mr. G. F. Bodley's protests.

We hope Mr. Bolton may find time some day to rearrange, rewrite, and extend this treatise, and to include in his examples and illustrations some of the fine restrained and simple instances, the manor and farm houses, that abound especially in the southern and western counties of England, and whose beauty of proportion and homely dignity easily condone the innocent little architectural barbarities that sometimes qualify their sparse adornments.

We are in full agreement with him when he says that too much attention has been directed to such ill-regulated ornamentation. We think it is because the comicality, the "quaintness," that always appeals so obviously to the amateur in any naïve crude workmanship, whether Norman, Fijian, or Jacobean, has been so much insisted upon, admired and haggled for, photographed and published in popular magazines, that the style has got a bad name, as being mainly associated with the stock-in-trade of pot-bellied caryatids, bulging divinities, angels and heroes, bestial and gruesome monsters, bulls and boars, hogs and dogs, sprawling arabesques, and crude arcading, and all the tiresome iteration of unnecessary humps and bosses that beset the worst examples of its decorative efforts.

These things mar the style and mark a low ebb of sculptural taste; granted, but they do not compose the style, they are its mere exuberances. And there is much of Jacobean ornament that is delightful in its vigour and naturalness, in effective outline, in happy play of light and shade. There is rare beauty in the simpler plasterwork, in the more restrained wood carving, the quiet flutings, and pretty little frets and patterns.

Go, if you are sceptical on this head, to Knole, to Merton Library, and Magdalen Dining Hall at Oxford, or to the Combination Room and Library at St. John's, or the Master's Lodge at Queens', Cambridge.

EDWARD WARREN, F.S.A. [*F.*].

THE ERECHTHEUM AND THE PROPYLÆA.

Problems in Periclean Buildings. By G. W. Elderkin, Ph.D., Princeton University. (Princeton Monographs in Art and Archæology, II.) Lond. 1912. *Price* 7*s.* 6*d. Henry Frowde, Oxford University Press.*]

There are four problems considered in this Princeton University monograph of sixty pages. Three are concerned with the Erechtheum, one with the Propylæa. A consideration of the unsymmetrical arrangement of the windows in the Pinacotheca of the latter leads the writer to trace the course of the original zig-zag road up to the Acropolis, and his suggestion seems further supported by the orientation of Agrippa's monument. This Paper emphasises the fact that what the Greek sought was not so much an abstract symmetry as an apparent rightness of arrangement from definite and important points of view. And all the time he was hampered by the vested interests of priest and cult. This, indeed, is the dominant note throughout the monograph. We are perhaps inclined in our schools of architecture to think of the Greek rising half-inhumanly to a kind of chilly perfection. It is a corrective of this view, and will make Greek work much more vital for us, to realise how the Erechtheum design (on Prof. Dörpfeld's theory, which is supported in this monograph) was truncated and left a patchwork in deference to religious opposition, or how Pericles' great Acropolis entrance was spoilt by the building, as a political move, of the little Nike temple. Professor Elderkin deals at some length with the plan of the Erechtheum as built and as originally projected, and illustrates many points vividly with photographs of constructive detail. In dealing with so complicated a matter as this, however, more views of the building as now standing would have been helpful, and the points of the compass are noticeably lacking on the plans. In explaining the 'Maidens' of the Caryatid Porch, the writer supports his theory that they are a conventionalised representation of the Ἀρρηφόροι (the four little girls who carried the mysterious burden to the Temple every year) by the evidence of an old pediment sculpture in the Acropolis Museum, and, further, by figures on a Bœotian amphora now in America.

WILLIAM G. NEWTON [*A.*].

CORRESPONDENCE.

The Lighting of Picture Galleries and Museums.

Christchurch, N.Z.: 10*th Feb.* 1913.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR:—I have to thank Mr. Stanley Hall for drawing attention to what he, and therefore perhaps others, may regard as objections to the system I have proposed for the better lighting of Art Galleries. His objections are fully answered in my Paper (JOURNAL R.I.B.A., 23rd November 1912), but that he has not fully grasped the principles I insisted on nor the manner in which I suggested they should be carried out is, I can readily believe, my own fault in not making them sufficiently explicit. I trust any other of our members who, having studied the question, can see in my system any objections, or can suggest improvements, will also give me the opportunity of considering them.

While welcoming full discussion as the only means of arriving at an ultimate successful issue, I must ask members to do me the justice of reading my Paper carefully, so that a misconception of the principles laid down may not be circulated, and the issue thus confused. Mr. Hall has not done me this justice in respect to his first objection, that of "extravagance of plan," for he states "that for every two pictures measuring 8 feet wide a floor space of 352 square feet would be required." That is not so, for it is clearly stated on page 51 that the length of the gallery would be divided into bays, and that one picture would be hung on each side of the partitions forming them. Mr. Hall has left these out of his calculations, and considered only those hanging on the outer walls of the bays. I stated that the width of the bay would be governed

by the laws of reflection of light. I find by making a section of the bay through the partitions and lights that the maximum width of the bay, for a gallery of the heights given, would be 24 feet. The double bays of this width would have 48 feet of wall space on the outer walls, and, allowing only 4 feet on each partition, a total of 64 lineal feet of wall space for each double bay, which would give 6·1 lineal feet of wall space for each 100 feet of floor space, not 4·8 lineal feet, as stated by Mr. Hall; but the question of economy of space in connection with the housing of pictures of national importance certainly did not occur to me. "A picture that is worth buying is worth so much of room of ground and wall as shall enable us to see it to the best advantage." Surely the charge of extravagance should be made against the expensive top-lighted galleries which have been proved to be but ill adapted for the purpose of their erection, rather than against a gallery which requires, it is true, a few more feet of floor space, but which would enable us to see the pictures to the greatest advantage.

I give in my Paper (page 52) a diagram showing the application of the "top-side-lighted" method to rooms of less importance, in which the central corridor is wholly omitted and the gallery therefore reduced in width to the usual 32 feet. The essential principle of my system is that the top-side-lights are so placed that the space on the walls covered by the pictures is the best lighted part of the room, and this principle can be carried out with or without the central corridor shown in my diagram (Fig. 7, page 51). The advantages of the central covered corridor, however, are such that no important gallery should be erected without it.

Mr. Hall states that the Mappin Art Gallery, which I said was too narrow, is only 5 feet less in width than my own, but he has omitted to notice that while the total width of this gallery is 39 feet (my own for 8-feet wide pictures being 44 feet), 18 feet of it is given up to the central corridor, leaving only 10 feet 6 inches for the depth of the bays. Eighteen feet is an unnecessary width for the corridor, and 10 feet 6 inches would only be a suitable depth of bay for the exhibition of small pictures—5 feet and under. It would not be necessary, as pointed out in my Paper, to make all the bays 16 feet in depth, but there should in all galleries be some of that depth for the proper exhibition of pictures 8 feet wide and under.

Mr. Hall's second objection, "the troublesome reflection in the picture glass of the frames and pictures on the opposite wall," will not exist in a properly lighted wide gallery to the same extent as in a narrow one. It must be remembered that reflected light, like direct light, will diminish inversely as the square of the distance, so that in a room 44 feet wide the reflections from the opposite pictures would be less than half as powerful as those in a room 30 feet wide, and but little more than half those in a room 32 feet wide. Moreover, the great difference in the length of the focal planes of the picture and the reflections of the opposite picture within it would allow the picture to be looked at without discomfort. Mr. Hall has evidently overlooked these points, but if it should happen that any reflections from very light pictures in very dark ones become too dominant, they could easily be got rid of by the simple expedient of bringing the picture slightly forward at the bottom, as shown by my diagram (Fig. 4, page 47) relating to the reflection of the windows in the pictures. By making a diagram of the possible reflections, it will be found that the picture only needs to be brought forward at the bottom 4 inches in 4 feet to throw the reflection of the opposite pictures much above the level of the eye of the spectator when seated at the correct distance or when standing in the corridor. The pictures on the ends of the partitions will be very well lighted and can be so placed that they will be quite free from reflections from the best point of view.

Mr. Hall also thinks I have made "too much of the question of the light on the floor," and insists, as I had done, on its being either stained or covered with a dark material. Mr. Hall forgets that, although he can stain the floor itself, he cannot apply his stain to the white dresses and hats, white collars and cuffs, and the bald heads of the spectators, which are illuminated in the brightly lighted central space of the usual gallery and have a very painful way of getting themselves reflected in the pictures.

In reference to the lantern lights in the Soane's rooms of the Dulwich Gallery, Mr. Hall has ignored my diagram (Fig. 10, page 54) showing how by raising the floor the pictures would be carried up into the well-lighted wall space which Mr. Hall admits exists above the present line of pictures. He has preferred to put a top light, and, of course, has succeeded in making the room more brilliant, but the distinction between a brilliantly top-lighted room, which must of necessity throw a flood of light on the spectators (see diagram, Fig. 9, page 53), and a scientifically lighted picture gallery cannot be too often insisted upon.—Yours faithfully,

S. Hurst Seager [*F.*].

The Safety of St. Paul's.

The Dean and Chapter of St. Paul's have addressed an official letter to the Lord Mayor inviting the Corporation to enter into a general agreement with them for the purpose of safeguarding the cathedral against any future schemes of tunnelling in its vicinity. Canon Alexander has stated that the Chapter felt strongly that some method ought, if possible, to be found of surrounding the building with a permanent line of defence, and there was good reason to hope that the Corporation, who were animated by a most generous spirit in their attitude to the national cathedral, would do everything in their power to reduce the risks to which the fabric was exposed.

9 CONDUIT STREET, LONDON, W., 29*th March* 1913.

CHRONICLE.

The Royal Gold Medal 1913.

The following letter has been received from Sir Wm. Carington, Keeper of his Majesty's Privy Purse :—

7th March 1913.

SIR,—I beg to acknowledge the receipt of your letter of the 4th instant, and to convey to you the King's gracious approval of the Royal Gold Medal for the promotion of Architecture being this year presented to Mr. Reginald Blomfield, A.R.A., of No. 1, New Court, Temple, E.C.

I also further request you to convey his Majesty's congratulations to Mr. Blomfield on his success.

I am, Sir, your obedient servant,

The Hon. Secretary R.I.B.A. W. CARINGTON.

Proposed Memorial to Mr. Norman Shaw.

A movement is on foot to erect a Memorial in London to Mr. Norman Shaw. An influential General Committee has been formed, and an Executive Committee appointed consisting of Lord Plymouth [*Hon. A.*], Sir Edward J. Poynter, P.R.A. [*Hon. F.*], Sir Thos. G. Jackson, R.A., Sir Aston Webb, C.B., C.V.O., R.A. [*F.*], Mr. Reginald Blomfield, A.R.A., President R.I.B.A., and Mr. Fred. A. White. A circular issued by the Executive Committee, inviting contributions from the friends and admirers of the late architect, says :—

The reputation of Mr. Norman Shaw is too world-wide for it to be necessary to do more than recall the fact that England abounds in works of his whose place is second to none in the architectural achievements of the nineteenth century. But it is not alone as architect and artist that his memory will live in the recollection of those who knew him and be bequeathed to generations to come. The fine sensibility which is discernible in Mr. Shaw's works was the product of a personality of unusual refinement and dignity, while his relations with all with whom he came into contact were marked by a courtesy and consideration that were as impressive as were his decision of character and his ripe judgment. Moreover, his great influence upon the art of his day is recognised not only by his immediate colleagues and contemporaries, professional and lay, but also by that younger generation of architects who will be responsible for the works of the present century.

Those of Mr. Shaw's friends who compose the Committee desire to lose no time in offering to a larger circle the opportunity of joining with them in erecting a Memorial to him. It is proposed that this should take the form of a monument with a portrait bust and a suitable inscription, to be placed in front of his great work in New Scotland Yard, facing the Thames Embankment.

It is hoped that this will be designed by Professor W. R. Lethaby, one of Mr. Shaw's pupils, and that the sculpture will be executed by Mr. Hamo Thornycroft, R.A. It is thought that the approximate cost will be from £500 to £600.

Contributions may be addressed to the London County and Westminster Bank, Lombard Street, account " R. Norman Shaw, R.A., Memorial Fund." or to the hon. secretary and treasurer, Mr. Fred. A. White, at 8 Lloyd's Avenue, E.C.

Rebuilding of Regent Street: Committee's Report.

The Report of the Committee appointed to consider the design for completing the rebuilding of the Quadrant, Regent Street, has been issued as a Parliamentary Paper [Cd. 6660]. The Committee was appointed in September 1912 to consider the design, " due regard being had to æsthetic considerations, commercial requirements, and the interests of the Land Revenues of the Crown." The Report, which is signed by Lord Plymouth, Sir Henry Tanner, Mr. Reginald Blomfield, A.R.A., and Mr. John Murray, makes the following recommendations :—

(1) The façade of the Piccadilly Hotel should be treated as the centre of a symmetrical composition, with façades of a simpler character on either side, terminating at the Circus and before Vigo Street, and repeating the motive of the hotel design.

(2) In regard to the question of sky-line the Committee were impressed by the evidence of the majority of the witnesses in favour of lowering it, but, after careful consideration of the question, the Committee find that, owing to the height of the roof of the hotel and the narrowness on face of the pavilions, the difficulty of designing any satisfactory addition to those pavilions such as would stop the roof and enable it to continue at a lower level is, in their opinion, insuperable. The Committee, therefore, recommend that the roof of the hotel should be continued in the new buildings, but that the design of the upper range of dormers and of the chimneys should be modified in order to reduce the obstruction of light.

(3) In the intermediate façades (that is, in the new buildings extending from either end of the hotel up to the pavilions suggested above) the following modifications should be made in Mr. Shaw's design (provided always that the lines of the main cornice and of the string-course above the mezzanine are adhered to) :

(*a*) The columnar recessed treatment of the storeys between the mezzanine and the entablature of the hotel should be omitted and a simple flat treatment without columns substituted for it.

(*b*) The arcades of the ground and mezzanine floors of the hotel should be omitted and rectangular openings formed for the shop-windows and mezzanine : the span between the piers should not exceed about 25 feet ; the shop fronts should be kept back not less than 12 inches from the faces of the piers, but they may project in the form of bays to a line 3 inches back from the faces of the piers. The piers should be of sufficient width to meet architectural requirements and to ensure harmony in scale with the design of the hotel, and the faces of the piers should be kept free of all obstructions excepting small unglazed tablets of uniform size and position.

(4) The bay at the north-west end of the hotel should

be altered so that the new intermediate façades begin immediately to the right and left of the existing hotel pavilions.

(5) The end pavilions should repeat the motive of the hotel, and the general character of the design of the intermediate façades should follow that of the hotel: that is to say, no manner alien to that design should be introduced, such as Neo-Greek, Nash's Classic, or modern French Classic.

(6) The design so modified and simplified should be adopted for the north side of the Quadrant, with pavilions at the ends, but omitting the hotel design in the centre.

(7) The façades of the County Fire Office and the block of buildings facing Piccadilly Circus and Piccadilly should be in harmony with the design of the Quadrant.

(8) No erections above the ridges of the roofs that would be visible from Regent Street should be permitted except chimneys.

(9) The blocking course and the row of stone dormer-windows over the cornice should be continued throughout the Quadrant, and the back wall enclosing at least the two top stories of the new buildings should be kept parallel to the front wall and be treated with due regard to architectural requirements.

The Admiralty Arch: Government Contribution.

A Memorial, signed by 311 Members of Parliament, has been presented to the Prime Minister asking the Government's reconsideration of their decision not to contribute to the cost of making an adequate and artistic approach to the Admiralty Arch from Trafalgar Square. The memorialists point out that the London County Council and the Westminster City Council have intimated their willingness to deal with the matter in a generous spirit, provided that some measure of financial help is forthcoming from the Government. The position of the two Councils, they urge, is a difficult—if not an impossible—one. Two elected bodies are asked to bear the entire cost of the completion of a thoroughfare to which they have already contributed a large sum of money, but over which neither they nor any other elected body will have control. Further, the traffic carried by this thoroughfare will be (most properly) of a selected and restricted character. It is also urged that, inasmuch as the Department of Woods and Forests have derived enormous sums from unearned increment in Pall Mall and its neighbourhood, the Government would be justified on that ground alone in contributing a third of the cost. It is understood that a conference on the question will take place between the two Councils and H.M. Office of Works, and that the Prime Minister has promised that the Government will give a substantial contribution towards the suitable completion of the scheme.

Town Planning and a Road Scheme.

In the House of Commons on the 20th inst.—

Colonel YATE asked the Prime Minister whether his attention had been called to the progress of the town-planning schemes around London, and to the necessity for the adoption of a general road scheme in connection with them; whether he was aware that such a scheme to meet the requirements of the increasing traffic of London had been published by the Board of Trade, and that if adopted and supported financially a considerable portion of the scheme might be carried out in connection with those town-planning schemes at comparatively small expense; whether he was aware that if these town-planning schemes round London were allowed to mature independently the opportunity for the construction of new main roads in and out of London might be lost for ever; and what steps he proposed to take in the matter.

Mr. ASQUITH: I am aware, generally, of the situation referred to by the hon. and gallant member, and I understand that the Local Government Board keep the Traffic Branch of the Board of Trade informed of all town-planning schemes that are started in the neighbourhood of London, and such efforts as are possible will be made to discourage divergent and inharmonious proposals.

Colonel YATE: Are special steps being taken to secure the opening up of these main arteries in London?

Mr. ASQUITH: I think it would be a great public advantage that it should be done; but there are pecuniary difficulties, as the hon. member probably knows.

Mr. JOYNSON-HICKS: Is the right hon. gentleman aware that the Road Board have a large sum accumulated now and that everybody is anxiously waiting for new roads? Will the Government make some representation to the Road Board? The money is there.

Mr. ASQUITH: If, as the hon. member says, the money is there, that is on the assumption that the Road Board will pay the whole of the expense, which would hardly be satisfactory to the taxpayers.

The Preservation of Leighton House.

Sir Edward J. Poynter, President of the Royal Academy, who presided at the annual meeting of the Imperial Arts League at Leighton House on the 12th inst., announced an interesting scheme for the preservation of Lord Leighton's residence in Holland Park Road. On Lord Leighton's death in 1896 his residence passed to his two sisters, who, believing that a permanent memorial was desired, handed over the property to three gentlemen, in the hope that eventually Leighton House might be permanently secured for the benefit of artists and the art-loving public. During the sixteen years that have since elapsed these gentlemen have succeeded in maintaining the house, partly by small offerings from occasional users of the house, but chiefly by the generosity of Mr. and Mrs. Russell Barrington and Lord Leighton's sisters. Attempts to find trustees in public bodies have failed, owing to the difficulty of providing a real guarantee that the property would be permanently devoted to art purposes according to the original intention of the donors. There was a further difficulty arising out of the obligations attaching to a lease and its determination. The owners of the Ilchester estate are now willing to sell the freehold to the League for £3,000, and the present proprietors of Leighton House are willing to surrender the leases to the League as an incorporated body providing the requisite guarantee in permanent trustees, so that the house may be maintained as a museum and art library and as a central institute and meeting-place for artists. In a letter dealing with the proposal the proprietors state:

Before the transfer of the property can be effected £3,000, the sum named by the vendor to purchase the freehold, and about £15,000 for the maintenance of the house in perpetuity must be obtained, towards which £1,000 has already been given. We appeal to the public for this sum, believing that there are in this rich country true lovers and patrons of art who hold in respect the memory of one who devoted his life to the welfare of art and artists in a catholic and generous spirit, and whose intelligence would recognise that the Imperial Arts League is following closely in Lord Leighton's footsteps in so much as its aims are to benefit all individual living artists, while preserving the dignity and right position of art in our great nation.

We have further to state that this is the last opportunity that can be given to the public to aid in the preservation of this generous gift of Lord Leighton's sisters to the nation—a gift which includes the priceless collection of Oriental enamels in the Arab Hall and in other parts of the house, paintings, and a splendid collection of drawings and sketches by Lord Leighton, which were presented to the house by King Edward VII. and other of the artist's friends and admirers. We feel that if such an absolutely suitable and beneficial arrangement does not appeal to Lord Leighton's countrymen as an object of support we shall, with deep regret, be obliged to close Leighton House to the public—a public which has certainly shown a keen appreciation of it during the last sixteen years.

Any further information can be obtained from the hon. secretary, Leighton House Committee, Leighton House, 12, Holland Park Road, Kensington, W., and from the secretary of the Imperial Arts League, 15, Great George Street, Westminster, S.W.

Canberra, the Federal Capital of Australia.

The ceremony of naming the Federal Capital of Australia and the laying of the foundation stone of the "commencement" column took place on the 12th March. The city is to be known as *Can*berra (the accent on the first syllable), the name of the little hamlet, with its typically English church, which already occupies the site. The "commencement" column is to stand on the slopes of the city's highest hill, in front of the Capitol. The pedestal will be composed of granite from the six States, and, if possible, stone from all parts of the Empire is to be used in the composition of the column. The site is described as a broad and smiling valley, partly hemmed in by hills, through gaps in which glimpses are occasionally afforded of the snow-clad ranges in the distance. The water supply is ample, and the Cotter River is expected to furnish sufficient electrical power for lighting, traction, and manufacturing purposes. The city, it is hoped, will be practically smokeless, and the sewage and storm water will be disposed of by gravitation. Knolls in the undulating valley will provide picturesque and conspicuous sites for the Parliament Houses and Government House.

It will be remembered that the planning of the new capital was thrown open to universal competition, but owing to the unsatisfactory nature of the conditions the competition was vetoed by the Australian architectural societies and by the parent Body in London: consequently, the competition was barred practically to all British architects. Eventually the first premium (£1,750) was awarded to Mr. W. B. Griffin, of Chicago. In a criticism of the winning design given by Mr. W. R. Davidge [*A.*] in a lecture delivered at the Garden Cities Association last November,* Mr. Davidge made it clear that the selected plan would in actual execution have to be considerably modified before it could be regarded as characteristic of the best examples of modern town planning. In fact the site would have to be made to fit the plan, instead of the plan being made to fit the site. In some cases he showed that in order to preserve the geometrical figure set forth on paper, considerable excavations would have to be made. The plan also misses the principle of the Garden City—the surrounding of the town by a belt of open country encircling the community, somewhat on the lines of the ring of park lands of Adelaide. Whole areas are set forth in residential districts planned on the ordinary "checker-board" pattern, which in time is bound to produce monotony.

The detailed report of the Board appointed by the Commonwealth Government to consider the designs has now been published, and in several respects bears out Mr. Davidge's criticisms. It is recognised that the premiated plan must be considerably altered in actual execution, and the Board themselves, instead of adopting it as a whole, have prepared a design of their own, based on what they consider the best points in the premiated and other designs purchased by them. The current issue of the *Town Planning Review* describes the plan as "the product of a Department whose *personnel* is utterly untrained in the elements of architectural composition, whose mind is a turmoil of confusion as regards the association of different buildings, and whose ideas on the simple logic of street planning have resulted in a road scheme which is simply a *reductio ad absurdum*. The whole lay-out is so entirely outside the pale of serious criticism that we feel that it cannot be put into execution. When compared with Mr. Griffin's plan, the defects of which are, after all, æsthetic rather than functional and technical, it is obvious at once that the 'final plan' is the work of an amateur who has yet to learn the elementary principles of laying-out a town."

Fire Tests of Roof Coverings.

There is great need for an effective roof covering that will withstand high temperatures from exposure-fires, and fire brands falling upon such coverings. The British Fire Prevention Committee publish in their Red Book No. 174 an account, illustrated with diagrams and photographs, of the Fire and Fire-and-Water Tests with Asbestos Cement Corrugated Roofing carried out on the 16th October last. Eight roofs were tested: Nos. 1 to 4, pitch 32°, covered with asbestos cement corrugated roofing on boarding; Nos. 5 and 6, pitch 45°,

* *Garden Cities and Town Planning Magazine*, Dec. 1912.

covered with asbestos cement corrugated roofing on purlins; Nos. 7 and 8, pitch 68°, covered with asbestos cement corrugated roofing with ends bedded on wall. The tests demonstrate that an effective roof covering is still to seek, and that further research is needed both as regards its composition and more especially the methods of supporting it. The following is extracted from the Report :—

No. 1. At the conclusion of the fire-and-water test it was found that numerous fractures had occurred in the asbestos roof covering where subjected to the greatest heat.

No. 2. In 30 minutes at the conclusion of the fire test, the underside of boarding was flaming heavily, and the corrugated sheets had developed numerous cracks.

No. 3. At the conclusion of the fire-and-water test it was found that the asbestos roof covering had fractured and pieces had fallen away.

No. 4. At the conclusion of the fire test it was found there were several cracks in the asbestos roof covering, and the boarding on the underside was charred, and that under the seat of fire was destroyed.

No. 5. At the conclusion of the fire-and-water test, one of the asbestos sheets was broken away along the lower edge and was to some extent brittle.

No. 6. At the conclusion of the fire test there were two holes in one of the asbestos sheets, and the top of the lowest purlin was considerably charred.

No. 7. At the conclusion of the fire-and-water test, the lower edges of the sheets were broken off, and the sheets had become brittle.

No. 8. In five minutes an explosion occurred, causing a hole in the asbestos covering of one of the sheets.

R.I.B.A. Prizes and Studentships 1914.

The subjects of competition for the various Prizes and Studentships in the gift of the Royal Institute for the year 1914 are now set, and the pamphlet giving full particulars will be ready for issue in a few days.

COMPETITIONS.

Barnet Municipal Offices.

Valley Workmen's Cottages.

Horbury Public Hall.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competitions, because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

Gwyrfai Workmen's Houses Competition.

Members and Licentiates of the Royal Institute of British Architects are advised not to take part in the above competition until the conditions are amended.

By order of the Council,
IAN MACALISTER, *Secretary.*

THE EXAMINATIONS.

The Final: Alternative Problems in Design.

The Board of Architectural Education have approved the designs submitted as Testimonies of Study under the new regulations by the undermentioned students :—

Subject VI.

A COLONNADED SCREEN.

C. J. K. Clark	A. E. Lowes
George Crossley	W. Voelkel
W. Gougill	

Subject VII.

(*a*) DESIGN FOR A MONUMENTAL STAIRCASE AND VESTIBULE TO A LARGE MUSEUM.

G. Bennett	H. C. Mason
H. C. Bradshaw	A. L. Mortimer
E. R. Cole	E. Musmann
G. Davidson	B. Newboult
R. S. Dixon	E. B. Norris
R. Duckett	A. H. Owen
W. E. Foale	A. R. Shibley
S. A. Harper	A. Stevenson-Jones
L. S. Henshall	A. J. K. Todd
F. Jenkins	D. P. Trench
A. F. Kaltenbach	R. A. Walter
F. O. Lawrence	A. Wilson
G. M. Mackenzie	W. C. Young

(*b*) DESIGN FOR A VILLAGE INN.

P. D. Bennett	J. Macgregor
J. W. Bull	G. M. Mackenzie
J. A. Clarke	D. J. Moss
H. T. Cooksey	Mary Shewen
J. C. Farrer	A. J. Sparrow
W. S. Foster	J. O. Thompson
A. L. Horsburgh	P. T. Wilsdon
C. H. James	R. S. Wilshire
H. Lidbetter	A. J. Wood
R. M. Love	C. H. Wright

MINUTES. X.

At the Tenth General Meeting (Ordinary) of the Session 1912–13, held Monday 17th March 1913, at 8 p.m.—Present: Mr. Reginald Blomfield, A.R.A., *President*, in the Chair; 45 Fellows (including 16 members of the Council), 50 Associates (including 2 members of the Council), 9 Licentiates, and numerous Visitors—the Minutes of the Meeting held 3rd March having been already published were taken as read and signed as correct.

Mr. E. Guy Dawber, *Vice-President*, acting for the Hon. Secretary, announced the decease of Herbert Winstanley, elected Associate 1860.

Mr. Dawber also read a letter from Sir Wm. Carington, Keeper of his Majesty's Privy Purse, announcing the King's approval of the award of the Royal Gold Medal for the current year to Mr. Reginald Blomfield, A.R.A.

A Paper on MODERN FRENCH ARCHITECTURE having been read by M. Fernand Billerey, and illustrated by lantern slides, a discussion ensued, and on the motion of Mr. H. Heathcote Statham [*F.*], seconded by Mr. Edward Warren, F.S.A. [*F.*], a vote of thanks was passed to the author by acclamation.

The proceedings closed at 10.30 p.m.